

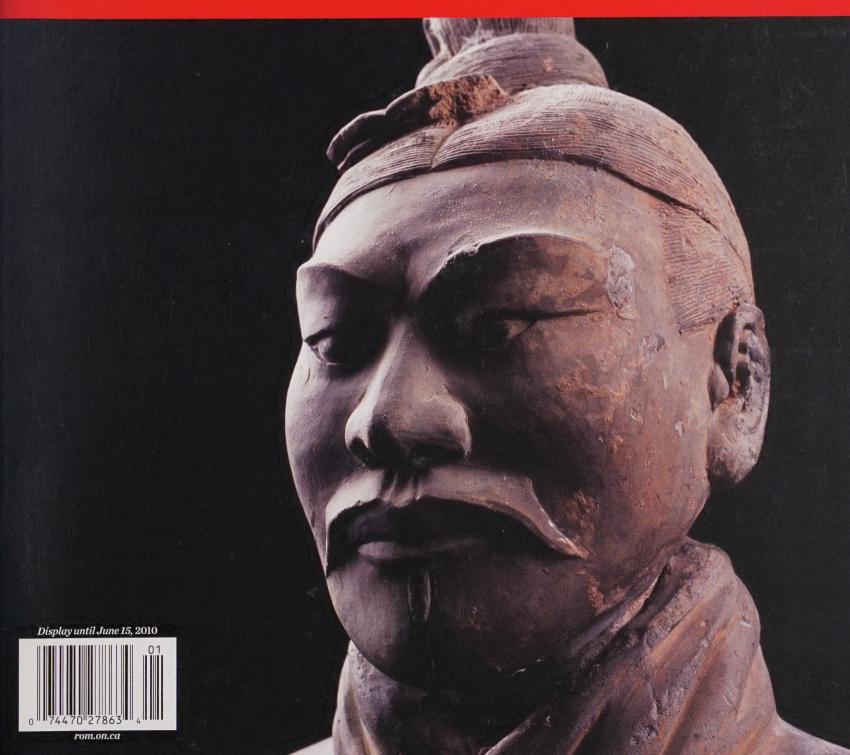


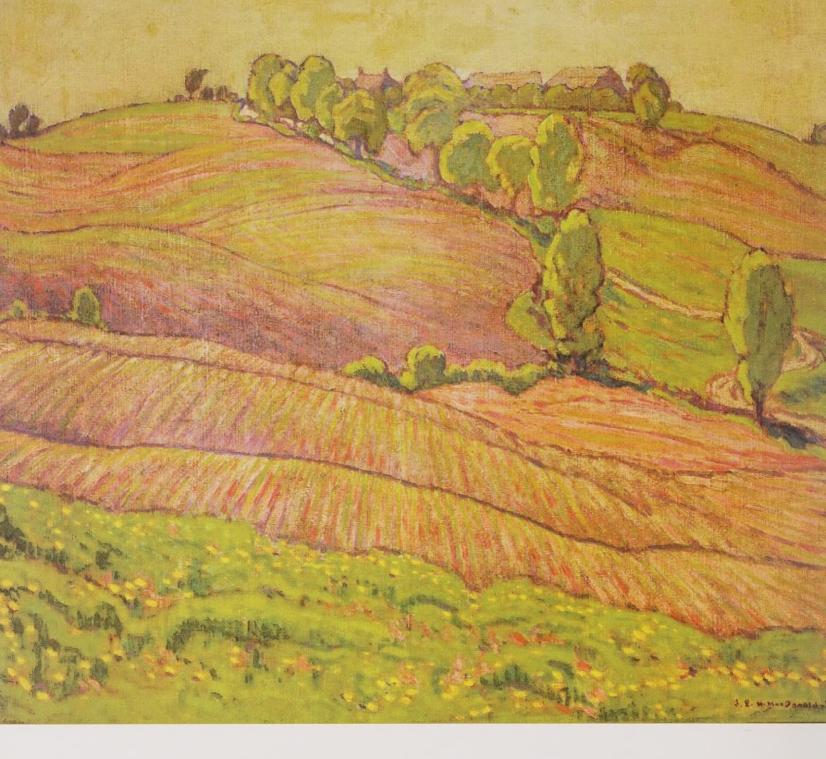
Spring 2010

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Magazine of the Royal Ontario Museum

CHINA'S FIRST EMPEROR AND HIS TERRACOTTA ARMY: The surprising legacy of the man who unified a nation / Behind Dior's New Look: The making of a fashion icon / Why we should sweat the small stuff: The ecological services of insects and other small living things / *Plus*: JAMES CHATTO on the art of noodle making / MARK KINGWELL on ambition's evolutionary dividends





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Contents

Features

18 China's First Emperor and His Terracotta Army

The extraordinary achievements and surprising legacy of China's First Emperor BY STEVEN SPENCER

22 Soldiers of Fortune

What the excavation of China's Terracotta Army reveals about the Qin dynasty BY CHEN SHEN

24 Dior's Scandalous New Look

When this fashion icon's New Look burst upon the fashion-starved post-World War II scene, it spawned protests as well as raves BY ALEXANDRA PALMER

29 No Small Matters

Why our planet would not survive without the ecological services of insects and other small organisms BY GLENN B. WIGGINS

Terracotta Warriors

p. 18

Front

- First Word
- What's On at the ROM
- Journal
- 12 Opinion
- 13 Ask an Expert
- 14 Field Notes
- 16 Our Curators
- Map of Explorations

Back

- 32 Backyard Biodiversity
- 34 Cuisine & Culture
- 35 Shopping
- 36 KidStuff!
- 44 Exhibit A

For Our Members

- 37 Members' Message
- 38 News and Programs
- 39 Travel
- 40 Events
- 42 Support
- 43 Sponsorship

ON THE COVER

World culture (main image): This infantry soldier is part of China's Terracotta Army

Photo: © Shaanxi Provincial Cultural Relics Bureau and the Shaanxi Cultural Heritage Promotion Centre, People's Republic of China, 2009

Natural history: Sevenspotted lady beetle

Photo: iStockphoto.com/@ arlindo71

INFORMATION

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Saturday through Thursday: 10 am to 5:30 pm; Friday: 10 am to 9:30 pm; closed Christmas Day.

ROM LIBRARY

Public hours: Noon to 4:30 pm, Monday through Friday

ADMISSION PRICES

ROM Members: FREE* Adults: \$22 Students and seniors with ID: \$19 Children (4 to 14 years): \$15 Infants 3 and under: FREE

On Half-Price Friday Nights, presented by SunLife Financial, from 4:30 pm to 9:30 pm: Adults \$11; students and seniors with ID \$9.50; children \$7.50

Admission, except for ticketed exhibitions, is free after 4:30 pm Wednesdays.

Admission is free on Tuesdays for postsecondary Canadian students with ID.

Museum and Arts Pass Program participant.

*All adult Members must present a valid membership card. Membership cards are not transferable.





Alexandra Palmer SENIOR CURATOR

As senior curator of Textiles and Costume at the ROM, Palmer ("Dior's Scandalous New Look") knows a thing or two about fashion history. Her research covers the history of Western textiles and fashionable dress with particular emphasis on the 20th and 21st centuries. In her latest book, Dior: A New Look, A New Enterprise (1947–57), she explores the fascinating rise of the house of Dior from a global corporate perspective.

What drew you to study fashion? I've always been interested in culture and design. My work involves looking at fashion through history and studying clothing as objects. I love the stories behind the fashion. Many people don't realize how fashion permeates our everyday life in so many ways—emotionally, physically, and financially.



Chen Shen SENIOR CURATOR

Shen ("Soldiers of Fortune"), the Bishop White Chair of East Asian Archaeology at the ROM, has been planning the exhibition The Warrior Emperor and China's Terracotta Army for more than two years, and is responsible for developing the Canadian national tour. His last blockbuster was Treasures from a Lost Civilization, which revealed a mysterious bronze-age culture from China. Over the past 13 years, Shen has done fieldwork in paleolithic archaeology in China, taught at the University of Toronto, and worked on the ROM's Far East collections and galleries

What intrigues you most about the Terracotta Army? The fact that these soldiers, molded from clay with such individuality and personality, survived 2,000 years is phenomenal. From the Terracotta Army we not only observe the vast scale of Qin's military battle formations—including cavalry, chariotry, archery, and infantry—but we also feel the emotion of the soldiers, from young to old, who express their pride, loyalty, sobriety, worry, yearning, and sadness, while ready to win the battle for their emperor.



Steven Spencer INTERPRETIVE PLANNER

Over a 24-year career at the ROM, Spencer ("China's First Emperor and His Terracotta Army") has worked on the conceptual design of a great many permanent and special exhibitions, each one a unique experience. He is grateful to have been asked to participate in planning *The Warrior Emperor and China's Terracotta Army*. Like everyone else above a certain age, he well recalls the excitement that surrounded the unearthing of the terracotta warriors in 1974 and subsequent years.

What intrigues you most about the terracotta warriors? It is not so much the life-sized, individualized figures themselves that astound me but the reasons (however speculative) for which they were made. When you consider the terracotta warriors within the context of the whole tomb complex of the Qin First Emperor—perhaps the largest such complex ever built anywhere-you realize that you are facing the product not only of a baffling belief system but also of a tyrannical, visionary mind. I'm pleased that our exhibition concerns itself as much with the First Emperor as it does with the terracotta warriors; both are fascinating.



Glenn B. Wiggins CURATOR EMERITUS

Wiggins ("No Small Matters") is curator emeritus in the ROM's Department of Natural History and professor emeritus in the Department of Ecology and Evolutionary Biology at the University of Toronto. A curious observer of living things of many kinds, his main research focus is the biosystematics of the aquatic insect order *Trichoptera*, or caddisflies. He has produced five books and more than 100 articles in scientific books and journals.

Are you concerned about life on Earth? Definitely. Human impact on the planet is spiralling out of control, in large part because the fragility and fundamental importance of the ecological support systems in the natural world are not understood or are disregarded by those responsible for making decisions that influence the future of the planet.



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A Letter from our **Director and CEO**



China's **Terracotta Army: Relics** of Immortal Belief

"All are of the dust, and all turn to dust again." Ecclesiasties, 3:20

China's First Emperor, Shihuang, had no time for "dust." He conscripted 700,000 people to build his massive mausoleum—a model of a city that would surround his casket and an army of 8,000 terracotta warriors to defend him in the afterlife, all buried beneath a mound larger than the Great Pyramid of Egypt. The project took 37 years. Like the Egyptians themselves, the First Emperor was preparing for immortality in the afterlife, and wanted to ensure the comforts and protections required for eternal bliss. Dust not.

Four years after Qin's burial in 210 BCE (the tomb workers and many of his concubines were interred with him), a peasant revolt overthrew his successor. Much of the subterranean Terracotta Army was smashed and burned. The First Emperor was effectively the last of his line. His legacy was the unification of China, which was far more consequential than the warriors, as wondrous as they are in our major exhibition at the Royal Ontario Museum this year.

Fortunately for modern museums, ancient nobles' belief in the afterlife motivated the construction of elaborate tombs, containing the best of local arts and technology. This fetish for building tombs featured the deliberate collection of important objects, and serious attention to their conservation in secure, dry chambers. It might be said that the early emperors were curators of their own lives for our edification. A significant proportion of the ROM's best collections exist because they were carefully preserved in tombs.

So the emperors live on, not in the afterlife they imagined (methinks), but certainly through other people's experience of their treasures. It is an unintended consequence, but a happy one for us.

In the contemporary world, material preparation for one's own afterlife is rare, though some pretty garish new tomb structures appear in Toronto cemeteries from time to time. Instead, we consciously understand our legacy to be focused on other people—an ethically superior concept one might suggest. The modern legacy impulse takes many forms.

Parents exert themselves to ensure the best possible prospects for their children by supporting their education and leaving them wealth. Others extend their sights to the community through philanthropy, or, if they lack money, seek a legacy in students well taught, laws well conceived, books well written, or buildings well designed. Some collect art and leave it to public museums. Some study science and feed millions, or invent computers that millions of others use to improve the world.

Our individual egos remain robust in projecting beyond our life spans, but we do not generally see our individual selves as part of the picture.

The title of the ROM's exhibition, which opens in June, is The Warrior Emperor and China's *Terracotta Army*. The first part of the title refers to the coalescence of a great civilization under a powerful visionary, the second to his compelling, wonderful folly. The underlying topics are ego and society in the context of mortality. Be prepared to learn, marvel, and think things through again.

WILLIAM THORSELL DIRECTOR AND CEO

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Exhibitions and gallery openings



In the Spotlight

Opening June 2010 Feature Exhibition

Garfield Weston Exhibition Hall, Michael Lee-Chin Crystal, Level 2B



The Warrior Emperor and China's Terracotta Army

Ying Zheng, the First Emperor of China, ascended the throne of a small State called Qin in 246 BCE at the age of 13. By 221 BCE, Ying had conquered every independent Chinese state, ending 500 years of warfare and state rivalry, and becoming king of all China. To demonstrate his power and position, he pronounced himself the First Emperor in the hope that the Ying family's rule would continue for thousands of generations. Though his dynasty lasted only a few years after his death, it was the First Emperor who created one of the world's marvels-the Terracotta Army.

This series of some 8,000 full-sized clay sculptures of Chinese warriors was discovered in 1974 in northern Shaanxi province. One of the most significant archaeological finds of the 20th century, the Terracotta Army is one of China's national treasures and its dig site is a UNESCO World Heritage Site.

This June, the largest exhibition of the Terracotta Army to come to North America starts at the ROM. The Museum has organized the Canadian tour of The Warrior Emperor and China's Terracotta Army, which will later travel to Montreal, Calgary, and Victoria. The show features more than 250 artifacts, among them 18 of the life-sized terracotta sculptures.

Senior curator Dr. Chen Shen, who developed content for the show, says "The number of full-sized warriors and the exhibition's scope makes this the largest display of the First Emperor's Terracotta Army ever to be seen in North America. Many of the artifacts have never before left China and some have not yet even been displayed in any Chinese museum." It's a once-in-a-lifetime opportunity to see a magnificent slice of history.

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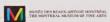
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Glenbow Museum

This exhibition was organized by the Royal Ontario Museum in partnership with the Shaanxi Provincial Cultural Relics Bureau and the Shaanxi Cultural Heritage Promotion Centre, People's Republic of China, with the collaboration of the Montreal Museum of Fine Arts, the Glenbow Museum, Calgary, and the Royal BC Museum, Victoria.





April 3 to May 2, 2010 Feature Exhibition

Feature Gallery, Hilary and Galen Weston Wing, Level 2

BAMIYAN: "the heart that has no love/pain/ generosity is not a heart"

This contemporary art installation produced by Vancouverbased media artist Jayce Salloum and Afghan-Hazara artist Khadim Ali takes the form of an archive. Photographs, video, and miniature paintings examine the destruction of the colossal 6th-century Buddhas of the Bamiyan Valley in central Afghanistan by the Taliban in March 2001.

Presented by the Institute for Contemporary Culture in collaboration with SAVAC (South Asian Visual Arts Centre) and the Images Festival.

Out of the Vaults

May 8 to July 4, 2010 Feature Exhibition

James and Louise Temerty Galleries of the Age of Dinosaurs Michael Lee-Chin Crystal, Level 3

South African Dino Eggs

For eight weeks, the ROM offers a rare opportunity to see real dinosaur eggs and babies. The nests of prosauropod eggs-some of which contain beautifully preserved embryos fossilized just prior to hatching-are one of the rarest and most exciting finds in dinosaur paleontology. After five years of field and labwork (conducted with the University of Toronto), the 190-million-year-old nests with embryos—the oldest ever found—are on display. This project is providing invaluable data on dinosaur reproduction and growth and reveals in amazing detail how an early dinosaur grew up.





Until July 4, 2010 Ongoing Exhibition

Herman Herzog Levy Gallery, part of the Asian Suite of Galleries, Philosophers' Walk Wing, Level 1

East Asian Paintings & Prints: Recent Acquisitions

In Korean art, a whole genre, called eohaedo, is dedicated to the painting of fish and crabs. An eight-fold screen in the ROM's collection features whimsical yet realistic images of these water denizens. This is just one of more than 40 works currently on display. All are important paintings, calligraphies, and prints from Korea, China, and Japan.





Last Chance

Until March 28, 2010 Special Temporary Display Sir Christopher Ondaatje South Asian Gallery,

Michael Lee-Chin Crystal, Level 3

Kings of the Punjab at the ROM

This exhibit features two life-size portraits of historical kings of what is now the state of Punjab, northwestern India. Significant both for their quality and for being contemporary imaginings of significant historical figures, the images were painted by portrait artist Manu Kaur Saluja. The first portrait, depicting Maharaja Duleep Singh (1838–1893), is a copy of a celebrated painting housed in the Royal Collection of Her Majesty Queen Elizabeth II. The other, an original composition, depicts the most famous of Punjab kings, Maharaja Ranjit Singh (1780-1839). The artist's re-imagining portrays him as a young man full of the strength and power that led to his nickname "The Lion of Punjab."

The display of these two paintings is a collaboration of the Royal Ontario Museum and the Spinning Wheel Film Festival.





Until April 4, 2010 Feature Exhibition Centre Block, Level 3

Fakes and Forgeries: Yesterday and Today

Whenever collector demand outstrips supply of a genuine article, forgers often step in to fill the gap. Popular culture's fascination with ancient Egypt, for instance, has allowed unscrupulous counterfeiters to flood the market with a variety of fake Egyptian artifacts. In the natural world, fakery can range from minor enhancement of a genuine mineral or fossil specimen to bilking investors of millions of dollars for a worthless mining claim.

In this ROM-developed exhibition, forged objects ranging from Hellenic antiquities to Canal Street knock-offs are placed next to real ones and the differences explained.

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Roloff Beny Gallery, Michael Lee-Chin Crystal, Level 4 Dan Perjovschi: Late News

Romanian-born artist Dan Perjovschi's witty and incisive mix of drawings, cartoons, and graffiti is penned in permanent marker directly onto the walls of the ROM's Roloff Beny Gallery. Perjovschi first garnered international attention at the 48th Venice Biennale (1999), where he covered the floor of the Romanian Pavilion with drawings and political graffiti about life in the post-Communist era. The Institute for Contemporary Culture is pleased to present his first solo exhibition in Canada.

Generously supported by: Dekla

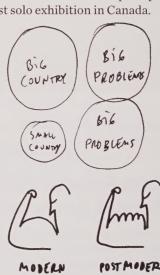
Until March 21, 2010 **Ongoing Exhibition**

Until August 15, 2010

Feature Gallery, Hilary and Galen Weston Wing, Level 2

Canadian Content: Portraits by **Nigel Dickson**

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Discoveries, Dispatches, and Discourse



New Acquisitions William Kent Cup

Document of a style master

Noted English artist, architect, and designer of the early 18th century, William Kent (1685/86-1748) would have been known to the Royal Family. He decorated rooms in Kensington Palace and designed public buildings in Whitehall as well as many private mansions. He is best remembered as a principal creator of the Palladian style of architecture popular during the early Georgian period.

Recently, the ROM was able to acquire a silver cup with intriguing connections both to Kent and more distantly to Frederick, Prince of Wales. In 1735, Kent designed an exceptional 22-karatgold presentation cup for Colonel James Pelham, who was secretary to the Prince. We know the design is by Kent because it was published in a set of engravings in 1744. The ROM's cup is made of silver-one of only five known to have been made from Kent's design. It is extremely rare to know the designer's name for 18th-century British decorative arts, especially silver, so we are particularly gratified to add this cup to the ROM's collection.

Made by silversmith John Swift a couple of decades after Kent's death, the cup is one of three hallmarked 1769, the ROM's and a pair made for the Governor of South Carolina. To make the silver versions of the original, Swift must have owned or had access to the sculpted models for the handles, foot, bowl, and cover. It's possible that it was Swift himself who made the original cupwhich was not hallmarked—for Colonel Pelham.

Growing scholarship since the 1970s and popular interest in design have increasingly pushed museums to seek documentary pieces those with a known designer and date and that are important enough in design, quality of workmanship, and state of conservation to document a phase of design, a style, or a designer. Beautifully preserved and weighing in at 78 ounces-slightly less than a 5-pound bag of potatoes—this cup certainly fits the bill. PETER KAELLGREN is curator emeritus in the European section of the ROM's Department of World Cultures.



Doin the ICC for a talk by Robert Mankoff, cartoon editor of The New Yorker magazine. on the treatment of controversial issues in editorial cartoons. April 13, go to rom.on.ca/ programs

> Left: Primatologist Jane Goodall vocalizing with one of her study

News

April is Nature Month at the ROM

The ROM has always been a place to learn about the natural world. In our galleries you can see specimens from fungi to fossil dinosaurs, learn interactively in the Hands On Biodiversity Gallery-even see live leafcutter ants in action in the Life in Crisis: Schad Gallery of Biodiversity. The ROM is becoming increasingly committed to its role as an advocate for the environment, a place to discuss the important issues that affect the world around us. This April, we continue that commitment with Nature Month, a series of public talks and programs. One highlight: a lecture by renowned primatologist Jane Goodall on April 9, 2010. For tickets, go to uofttix.ca or call 416.978.8849. For other programs, go to rom.on.ca.

50 Years of Chimps and Change is co-presented by the Royal Ontario Museum and the Jane Goodall Institute of Canada in partnership with the Ontario Ministry of Natural Resources and the Centre for Environment, University of Toronto, as part of the ROM's Slice of Life: Biodiversity Lecture Series.

News Couture

Coup

At an Ottawa vintage clothing sale, ROM curator Alexandra Palmer spotted a dress she recognized immediately as a couture classic. The only problem was that many other shoppers also gravitated to the sexy '50s cocktail number by Italian designer Gigliola Curiel. Palmer, who studies couture fashions and wrote the award-winning book Couture and Commerce: The Transatlantic Fashion Trade in the 1950s, gave her card to the young woman who was trying it on, Anna Chambers. Chambers ended up purchasing the dress and donating it to the ROM, where it will eventually be displayed. Palmer's latest book is on Dior. See page 24 to read an excerpt.





In Conversation

Francisco Alvarez, managing director of the ROM's Institute for Contemporary Culture, speaks with artist Dan Perjovschi, whose work is featured in the ICC exhibition Dan Perjovschi: Late News.

Francisco Alvarez: How did you begin the practice of drawing directly on the walls of galleries and museums?

Dan Perjovschi: I became an artist in a communist, then later a post-communist, country where there were shortages of everything from toilet paper to books. There was no money for the arts, no spaces to work, and no real public interest. I was controlled by censorship and propaganda for 28 years of my life, searching for ways to be in charge. So, I tried to reduce my dependence on others, using very simple tactics. I first drew on a wall in 1995 in New York, and it took another 15 years to establish my current practice. I created my first cartoon/ graffiti project at the Venice Biennale in 1999, when I drew over the entire floor of the Romanian Pavilion.

FA: How do you feel your work is different from that of political cartoonists in newspapers and magazines?

DP: In my case it isn't. I often publish drawings in newspapers and magazines. Until 1997, I believed that the newspaper work and the work in art institutions were two different things. Then Kristine Stiles, a theorist from Duke University, suggested that what I do at the newspaper is also a form of public art. In 1998. I was invited to the Manifesta 2 biennial, not to show at the museum but to publish drawings in the local Luxembourg newspapers during the exhibition. Now, no matter what I do, there is one concept: I act as a researcher-reporter. I travel the world drawing it.

FA: Why do you choose to have your installations painted over at the end of their run?

DP: Institutions remove my work because they need the space. They can't figure out how to hold, collect, or pay me. Only the Van Abbemuseum slowed me down, basically leasing my work for five years. The rest just paint me over with no mercy. But this is good. I can come back later and draw again.

FA: What subjects are of greatest interest to you these days? **DP:** The year 2009 was a year of global economic crisis. It was also the year we in Europe celebrated the 20th anniversary of the 1989 fall of the Berlin Wall. I drew on these two big issues in all my installations last year. For 2010, I am interested in the battle over global warming and the excesses of consumer society. But wait. The world is full of surprises. You don't know what next week will bring.

Generously supported by Dekla Dan Perjovschi: Late News runs until August 15, 2010, in the ICC's Roloff Beny Gallery.

The Institute for Contemporary Culture (ICC) is the Museum's window on contemporary societies, committed to presenting provocative examinations of current global cultural and social issues. For further information, go to rom.on.ca/icc.



Ancient DNA

The analysis of ancient DNA is now so advanced that a hair sample just 3 cm (a little more than an inch) long was enough to confirm the identity of the partially mummified bison to be found in the Mackenzie River Valley. Radiocarbon dating revealed that this particular bison lived approximately 12,000 years ago, not long before the species went extinct at the end of the last Ice Age. This Late Pleistocene date is relatively recent, considering that DNA up to 300,000 years old can be recovered. But our methodology is still well short of reaching back the 65 million years needed to retrieve dinosaur DNA as imagined by Michael Crichton in Jurassic Park.

Three ROM curators weigh in.

Burton Lim, mammalogist

Steppe Hunters?

During the Pleistocene, steppe bison became well adapted to the cool and arid grasslands of northern Eurasia and North America. They figure prominently in Upper Paleolithic cave art from sites in southwestern France such as Lascaux and at Altamira in northern Spain. In North America, the earliest steppe bison remains were found near Fairbanks, Alaska, and have been radiocarbon dated to around 36,000 years ago. At other sites in Alaska and the Yukon, steppe bison remains have been dated to between 32,000 and 12,000 years ago.

During the time when the Tsiigehtchic specimen lived, around 12,000 years ago, the coastal plains and interior of Alaska as well as portions of the Yukon and northwestern Northwest Territories were inhabited by the earliest securely dated archaeological cultures of the region. These cultures, which fall under a poorly defined rubric known as the Northern Paleoindian Tradition, are thought to have been thinly and unevenly dispersed across a vast landscape. Only a handful of sites, which have produced distinctive stone tools, are known.

Although artifacts were not found in association with the Tsiigehtchic steppe bison, its presence, as noted by researcher Grant Zazula and his colleagues, confirms that the region surrounding the lower Mackenzie River was free from glacial ice by 12,000 years ago and therefore was habitable. Our only existing evidence of inhabitation is from much later—around 4,000 years ago. Future archaeological research,

spurred by this finding, may reveal much earlier human settlement and associated artifacts.

Territories

Christopher Watts, Rebanks Postdoctoral Fellow in New World Archaeology

The Way of the Future

It is wonderful to see a fossil mammal specimen from northern Canada with both a carbon date and a DNA sequence. These kinds of studies are the way of the future, as they give us both a chronological and an evolutionary context that we couldn't get from studying the fossil alone. Recent studies from Alaska on bears and from Argentina on penguins have shown us how powerful the interpretation can be when both these additional kinds of data can be obtained.

Kevin Seymour, paleontologist

News

Canada Invests in the ROM

The Government of Canada has announced that it will provide up to \$2.75 million from the Infrastructure Stimulus Fund to support new ROM galleries. This will help us bring thousands more artifacts out of the vaults and into the galleries. The Honourable John Baird, Canada's Transport and Infrastructure minister, says, "Canada's Economic Action Plan is ensuring that the ROM remains a cultural treasure for decades of tourists and visitors."



From left to right: Paul Denis, associate curator; Dr. Marie Bountrogianni president and executive director, ROM Governors; The Honourable John Baird, Canada's Transport and Infrastructure minister; and Salvatore Badali, chair of the ROM Board of Trustees

News

ROM Showcases Biodiversity

To mark the United Nations' International Year of Biodiversity, the ROM is producing a new program, "A Slice of Life." In partnership with the Ontario Ministry of Natural Resources, the ROM will offer the year-long series of workshops, podcasts, lectures, and teaching tools aimed at encouraging Ontarians to appreciate and protect the nature that is all around us. Workshops—which are open to the public-will run regularly in the Earth Ranger Studio of the ROM's Life in Crisis: Schad Gallery of Biodiversity.



The Honourable Donna Cansfield, Ontario's Minister of Natural Resources with Dr. Marie Bountrogianni president and executive director. ROM Governors.

From the Archives

A Nation's Cultural Architect

Honouring Sir Edmund Walker

A dominant figure in the creation of the Royal Ontario Museum nearly 100 years ago, Sir Edmund Walker (1848-1924), who served as president of the Canadian Bank of Commerce, also played a crucial role in the founding of the Art Gallery of Ontario and the National Gallery of Canada.

In 1918, to mark 50 years of service with the bank, Sir Edmund was honoured with an illuminated manuscript and presentation casket, which now reside in the ROM Archives. Decorated in 10 karat gold, synthetic stones, and heraldic shields, the manuscript bears the mark for Ryrie Bros., a prominent Toronto silversmith firm. Both book and casket were designed and executed by acclaimed heraldic artist A. Scott Carter.

At the testimonial dinner at the King Edward Hotel, leading Canadian statesmen and businessmen recognized Walker's contributions. Born into poverty near Hamilton, Ontario, Walker rose through the ranks at the bank. While posted to its New York office, he often visited the Metropolitan Museum of Art and developed a passion for the arts. When he returned to Canada, he became spokesperson for the Guild of Civic Art and a strong advocate for new cultural institutions. By all accounts he was a master at cajoling friends into financing these endeavours, which he believed would foster civic growth and pride.

The exquisite book and casket attest to the high esteem in which Walker was held as an advocate for Canadian culture and nationalism.

ARTHUR SMITH is head of the ROM's Library and Archives



The Last Refuge of Failure

Though much maligned by philosophers, ambition has its rewards

BY MARK KINGWELL



"And when Alexander looked out and surveyed the breadth of his domain, he wept, for he had no more worlds to conquer." So quotes Hans Gruber, the "exceptional thief" played by Alan Rickman in the original *Die Hard* movie (1988). When his assorted Eurotrash henchmen receive this aperçu with puzzled looks, he adds wryly: "The benefits of a classical education."

Well, maybe. This famous expression of ambition's despair, the conqueror thwarted by exhaustion of opportunities, is in fact a historical spur with no clear source. Plutarch's essay "On Contentedness of Mind," from the *Moralia*, furnishes a more convincing account. Plutarch tells us that Alexander wept when he heard Anaxarchus talk about the infinite number of worlds in the universe. Asked by a friend why he was broken-hearted at what was merely a philosophical conjecture (in the biz today, we call it the thesis of *modal realism*), Alexander replied: "There are so many worlds, and I have not yet conquered one."

It is a matter of debate which condition is worse, ambition without object or ambition without limit; but both speak to the deep human restlessness that destroys contentment of the mind. The very thing that drives us, a desire for something, ends up destroying us.

Some years ago I published a book about happiness. Unsurprisingly, I found that most theories of happiness are really theories of unhappiness; and further, that most of these preached the same lesson, namely, that desire is the source of both happiness and its opposite. We want things, we strive for them, we ache. In that condition of seeking, we experience something life-ordering and valuable. And then we get the thing, satisfy the striving, salve the ache—only to find this satisfaction soon unsatisfactory. There is no escape from this circle, however, because the absence of desire is death. Even worse, desire is like heroin or cinematic special effects: it is subject to diminishing marginal returns, so that it takes more and more of what we desire to renew the initial high.

I was happy to publish the book, but not as much as I thought I would be, and not for as long. So it goes. Ambition is just routine desire on steroids, seeking larger objectives: victories, promotions, inventions.

The human penchant for spiralling desire has been much maligned by philosophers—the ancient Greeks called it *pleonexia*, a form of psychic pathology—but clearly it has been adaptive in evolutionary terms. If we were not perpetually dissatisfied, we would not have lasted this long! All the *happy* primates are dead, roadkill on the Darwinian highway.

And humans do come up with good stuff now and then. Ambition can be personally challenging, even disastrous or tragic—think of the costs of *hubris* which the same ancient Greeks knew so well—but it has given us, to pick more or less at random, Thermopylae, Euclidean geometry, Angkor Wat, the *Goldberg Variations*, Laphroaig single malt, the *Critique of Pure Reason*, penicillin, *Four Quartets*, abstract expressionism, Batman, and the Empire State Building, not to mention the *Die Hard* movie franchise.

Machiavelli probably had the clearest eye for the subject. The ambitious prince seeks personal advantage and gain, he said, employing whatever means are necessary. Fortune's fickle favour means he will almost certainly fail, usually sooner rather than later. But on the altar of his ambition is raised the glory of the city, greater than any one of us, greater even than the age. o

MARK KINGWELL is a professor of philosophy at the University of Toronto and the author, most recently, of *Glenn Gould* in Penguin's Extraordinary Canadians series.

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Rooted in the Ancient Tropics

A drowned forest, now a UNESCO World Heritage Site, is where this unusual fossil originated

BY JANET WADDINGTON

lycopsid tree, or giant club moss.

My father picked up this fossil on the beach at Joggins, Nova Scotia, in 2006. Can you tell me what it is? - Freddy Cook, Toronto

The Joggins area is famous for its fossils of the great coal forests of 310 million years ago. So called for the huge deposits of accumulated organic matter that eventually turned to coal, these were vast wetland forests that covered much of Earth's tropical regions during the Late Carboniferous and Permian. Your fossil is a piece of the spreading root system, or rhizophore, of a

Club mosses today are small moss-like vascular plants that grow close to the ground. But in the past they grew into giant trees 30 m (98 feet) tall or more. The trunks typically bore a very regular pattern of scars or scales where the leaves were attached, giving them the common name "scale tree."

The irregular dimples on your rhizophore mark the places where rootlets once emerged underground. While the trunks of different varieties of scale trees can be characterized by the pattern of their scales, the roots are all very similar and have been given the generic name Stigmaria.

Plant fossils are usually found in disassociated pieces because of the way the plant parts are dispersed and the nature of their composition-leaves and fruits, for instance, are usually soft and easily destroyed by biological or physical activity. So, fossil leaves, seeds, stems, roots, and even pollen or spores of a single species are often given different names until someone finds two or more of the pieces still physically together. Thus a single scale tree may be represented by a fossil stem called Lepidodendron, leaves called Lepidophyllum, and the spore-bearing organs





1. Freddy Cook's fossil, Stigmaria sp., the root of a giant scale tree.

2. Sigillaria sp., a section of the trunk of a scale tree in the ROM's collections.





3. Reconstruction drawing of Lenidodendron. another variety of fossil scale tree.

4. Common club moss today.

Lepidostrobophyllum and Lepidostrobus, as well as the *Stigmaria* roots. They often keep these separate names (termed "form taxa") even if discovered to be of a single species.

The woody trunk and branches were more durable than the other parts of a scale tree and thus were more frequently fossilized. They may have lain on the ground for years before they decomposed or were buried. Joggins is one of the few places in the world where numerous tree trunks and stumps have actually been preserved still standing. This is because the trees lived in a low-lying swampy area that was repeatedly flooded by the sea and then drained again, causing sediment to accumulate around the drowned trees, which prevented them from falling. The fossil trees and roots at Joggins are often natural casts-meaning that when the wood rotted away, it left a cavity that filled with sediment, which over time turned into stone, a replica of the original.

So, your fossil is an unusual reminder of Canada's ancient tropical past. Hold on to it, because in July 2008, the Joggins Fossil Cliffs were formally designated a UNESCO World Heritage Site and collecting there is now strictly controlled.

JANET WADDINGTON is assistant curator in the Paleobiology section of the ROM's Department of Natural History.



Savannah Nights

Surveying small mammals in Suriname

BY BURTON K. LIM

South America is known for its exceptionally high numbers of mammal species. Last July, I travelled to the Sipaliwini savannahs of Suriname to conduct a survey of the local small mammal diversity. I wanted to compare the native species with those from savannahs in Guyana and Venezuela and from the surrounding rainforest. The data I'm gathering will help me to test the hypothesis that it was changes in the environment over millions of years that led to South America's high levels of speciation.

Mark Engstrom and Lina Arcila signed on to help with the work and we spent four days in dugout canoes making our way up the increasingly shallower Sipaliwini River through dense tropical rainforest. We were headed for the open grasslands near the southern border with Brazil. Rocks and tree falls often blocked our path, and several times we hit rapids and had to jump into the strong current to push and pull our loaded boats through safely. When the boats would go no further, we slung our hammocks under a simple wood frame and called it home for the month.

Most mornings we woke to the roar of howler monkeys in the humid jungle on our side of the river. On the other side was my main collecting area—the dry sun-scorched savannah. Catching bats in the forest was relatively easy. Plenty of saplings allowed us to string our nets over the trails and streams where bats fly. In the savannah, though, we had to cut and haul saplings from the forest, and tie them to clumps of grass. Much to our surprise, though, during our nightly netting patrols, we caught more bats in the grasslands than in the forest. Many were fruit-eating species and we surmised that they were using the open grassland as a shortcut to get to their foraging grounds in the forest.

For the rats and opossums, we set live traps in the forest—baiting the ones on the ground with seeds and those in trees with fruit. Setting traps, too, was trickier in the savannah. The barren stretches of treeless grassland made it seem futile to find hiding spots and the patches of ant-infested palm swamps were definitely not fun to blunder through. Worst of all, in late afternoon tiny kaboura flies would rise by the billions from their lairs and drive us mad. But we were rewarded with the finding that the species of rats that live in the savannah are completely different from those in the forest.

We brought back about 70 species in total—it was one of our most successful collecting trips ever. I'm now analyzing DNA to see if there are molecular patterns that will help me understand why so many species have thrived in the South American tropics. \circ

BURTON K. LIM is assistant curator of mammalogy in the ROM's Department of Natural History.



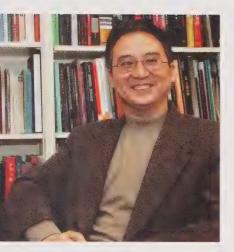




In Search of Stone Tool Smiths

A ROM archaeologist studies lithic technology to understand our early human ancestors

BY LEF-ANNE JACK



Chen Shen
SENIOR CURATOR
Department of World Cultures

Academic Positions 2010-present Senior Curator Bishop White Chair of East Asian Archaeology, Department of World Cultures, ROM

2007-2010 Senior CuratorBishop White Curatorship of East Asian Archaeology, ROM

2002-2007 CuratorBishop White Curatorship of East Asian Archaeology, ROM

1997-2002 Associate CuratorBishop White Curatorship of East Asian Archaeology, ROM

Education 1997 Ph.D. in archaeology, University of Toronto 1992 Master's in archaeology, The University of Tulsa, Oklahoma

Bachelor of Arts, Wuhan University, China ROM archaeologist Dr. Chen Shen is following in the footsteps of Toronto researcher Davidson Black, discoverer of the famed Peking Man fossils in China. Eighty years later, Shen is the only overseas researcher to take part in a new five-year project to stabilize the Zhoukoudian Cave site, where more than 41 Peking Man fossils were found. He's also looking for new evidence of our early human ancestors.

At the University of Tulsa, Shen learned his specialty: use-wear analysis—the microscopic examination of tiny nicks and scratches on the edge of a stone tool that indicate how it was used. This scientific approach to anthropological archaeology was new to the scholar who earned his undergrad in China, and he was excited that he could learn much about human behaviour from archaeological materials.

Since joining the ROM in 1997, Shen has been finding stone tools of earlier and earlier dates at field sites in northern China. He has dated tools from the Nihewan Basin back 1.6 million years, sparking his interest in human evolution. Now he's looking for evidence to support an alternative to the Out of Africa theory. To date, he's dug

As curator of The Warrior Emperor and China's

Terracotta Army, Chen Shen wanted the story of China's First Emperor to be a key element of the exhibition. He aimed to include as many terracotta soldiers as possible in the show which has been two years in development Shen managed to get the largest number of heads ever displayed, each a sculpture in its own right. And his idea of adding a third component to the show, products from the succeeding Han dynasty, show how unique the terracotta warriors are

Right: Figure of an armoured general that led a division of the Terracotta Army. It is one of two generals shown in the upcoming exhibition.





Left: This stone tool dated to 1.36 million years ago was likely used by Homo erectus in the Nihewan Basin, China. It was found near where Shen's team excavated a 1.6-million-year-old hominind

up several thousand stone tools from a dozen sites, and his findings indicate interaction among cultural groups about 100,000 to 40,000 years ago. "But to be certain who made the tools," he notes, "we need hominid bones." He has yet to find these elusive fossils.

But the Zoukoudian Cave project, headed by the Chinese Academy of Sciences, is already proving notable. "Some researchers thought that *Homo erectus* was kind of dumb, that they just picked up rocks to use," he says. But digging into the 40-metre-thick deposits, which represent half a million years of occupation, Shen and his co-workers have found more specialized tools—for graving, drilling, cutting, and scraping. Says Chen: "H. erectus was smarter than we thought."

For Shen, who also teaches Chinese studies at the University of Toronto, such exciting work confirms that he made the right career choice. In school, he was unsure of archaeology. "I knew it was sort of romantic," he laughs. But it was the prospect of travelling on field trips that lured the young Shen who grew up during the Cultural Revolution, when travel was difficult. Shen saw his dad, a geologist in China, travelling as part of his work and liked the idea. And travel he has—clocking more than 25 trips, most of them back to China.

Since 2004 this keeper of the ROM's pre-Han collection of bronze jades and archaeological materials has been one of 200 overseas-Chinese scholars selected to consult on China's scientific research proposals. This connection gained him entrée into the Peking Man site, and allowed him and the ROM team to become the organizers of the upcoming blockbuster exhibition *The Warrior Emperor and China's Terracotta Army*, which opens in June. o



Dave Rudkin ASSISTANT CURATOR Invertebrate Paleontology

Exciting new fossil discoveries in 445-million-year-old (Late Ordovician age) rocks in central and northern Manitoba are the focus of Dave Rudkin's research. At two widely separated areas. outcrops of ancient tropical seabed deposits contain extraordinarily well preserved remains of invertebrate animals rarely encountered elsewhere, including horseshoe crabs and other odd joint-legged animalseven entirely soft-bodied jellyfish. This collaborative project with colleagues at the Manitoba Museum and University of Saskatchewan is revealing some fresh and often startling insights into the ecology and evolutionary dynamics of life in shallow Ordovician seas





Arni Brownstone ASSISTANT CURATOR Ethnology

Five pictographic paintings recording the exploits of 14 Tsuu T'Ina (Sarcee) warriors are the subject of Arni Brownstone's current research. The paintings commissioned between 1905 and 1908 by non-Natives, are accompanied by unusually rich documentation, and Brownstone is exploring the dynamic between the two cultures involved in their production. One painting is at the ROM, but the Museum Volunteers Acquisition & Research Fund enabled Brownstone to examine in person two in New York and one in Seattle. He has met with tribal elders to study the final painting at the Tsuu T'ina First Nation, 10 km from the centre of Calgary.





Dan Rahimi VICE-PRESIDENT Gallery Development

A Bronze Age excavation in the Ararat Plain of Armenia has drawn Dan Rahimi to the ancient site of Shengavit. Occupied in the early years of urbanization, this site promises to reveal much about the evolution of cities in the southern Caucasus from about 3500 to 2500 BCE. Rahimi is excavating and studying the flint and obsidian industries of the site in an effort to map patterns of exchange and craft specialization. Early results indicate centralized production and active trading. It is possible that the obsidian was traded far into Mesopotamia. Analysis of trace elements in the obsidian will allow him to track its distribution across the region.

BORNEO



Chris Darling SENIOR CURATOR Entomology

Chris Darling and colleagues recently established an insect-sampling program for parasitic wasps at Gunung Mulu National Park (Sarawak). In 40 days in the field they set traps in a variety of habitats, from near sea level to more than 1,400 metres in elevation. Park staff will continue to collect and sort samples throughout 2010. The first samples were full of surprises! The specimen below is a new species of diapriid wasp. Highly modified wings like these have never been seen before. We expect to find many more weird and wonderful new species as we try to better understand how biodiversity is distributed in space and time in tropical forests.

INDONESIA



Rick Winterbottom SENIOR CURATOR Ichthyology

In January/February 2010, Rick Winterbottom visited the Raja Ampat region of Indonesia. The trip was part of a Conservation International survey of the coral reef fishes of the most diverse marine ecosystem on the planet. Such research trips, by documenting local species, help to fill in the huge gaps in our knowledge of fish distributions. As with every trip like this, several species new to science will undoubtedly be collected. The knowledge gained from this work helps in the ultimate analysis of how fishes came to be where they are, and how they are related to one another.











Where in the world are thev?

The who, what, and where from our international curatorial team

HINA'S

FOR CENTURIES THE CHINESE VIEWED THEIR FIRST EMPEROR AS A RUTHLESS TYRANT. BUT EVEN HIS GREATEST DETRACTORS COULDN'T DENY HIS EXTRAORDINARY ACHIEVEMENTS AND SURPRISING LEGACY—THE TERRACOTTA WARRIORS

BY STEVEN SPENCER





in Shihuangdi, the First Emperor of China, was little known outside his homeland before 1974. But in that year, his astonishing army of life-sized terracotta warriors was discovered near Xi'an, China. Still not fully excavated, the Terracotta Army is estimated to number more than 8,000 figures, including 400 chariot horses and 300 cavalry horses-and is protected as a UNESCO World Heritage Site. The

First Emperor created the Terracotta Army to serve him in the afterlife—a testament to his iron determination to dominate the realm of the hereafter, just as he had ruled in this world.

For most of China's history, chroniclers regarded the First Emperor in a highly negative light. They said he was ruthless and cruel, and merciless to his enemies, even those who had surrendered to him: he had "the heart of a tiger or a wolf." They claimed that he had buried hundreds of Confucian scholars alive, owing to his compulsion to dominate all, even the very minds of his subjects.

"Cracking his long whip, he drove the universe before him . . . overthrowing the feudal lords. He ascended to the highest position and ruled the six directions, scourging the world with his rod . . ." wrote Han statesman Jia Yi (201-169 BCE). "He discarded the ways of the former kings and burned the writings of the hundred schools in order to make the people ignorant."

Jia was not the only one to portray the First Emperor as an apparently insatiable tyrant, ruling his empire by fear and forcing its disparate parts to adhere to a rigid uniformity in writing, regulation, law, and administration. To create his grandiose palaces, tomb, and other projects, wrote some of his chroniclers, the First Emperor severely taxed his subjects and subjected hundreds of thousands to forced labour. So cruel was his reign, they wrote, that he lost the favour of heaven, and his dynasty collapsed within four years of his death.

Yet, if any figure in history can be said to have founded China it is the First Emperor. Most of the unflattering accounts date from the succeeding Han dynasty (206 BCE-220 CE), which had a vested interest in painting the preceding regime in the darkest of colours. Even so, the Han writers could not deny the First Emperor's more extraordinary achievements—without which the long, relatively peaceful rule of the Han would have been impossible.

It was the First Emperor who brought to a close the centuriesold Warring States period (481-221 BCE). This was an era of constant warfare, shifting alliances, betrayals, conquests, and losses. For the common people, the times were freighted with fear, violence, impoverishment, and death. Out of a multitude of states, seven kingdoms survived, among them the kingdom of Qin. But in 10 short years, the young king of Qin conquered the other six kingdoms, announced a universal peace, and declared himself the First Emperor of the nation.

As the first ruler to govern a truly unified China, he attempted to preserve this peace by radically augmenting the authority of the central government. A new system of administration replaced the old feudal kingdoms with 36 administrative districts, run by appointed officials. Everyone, down to the lowest villager, belonged to, and was responsible for, an administrative unit, and personal advancement in government was now based on merit, not birth, as it had been previously in many sectors. In fact, the establishment of a nation-wide civil bureaucracy was arguably the First Emperor's most enduring accomplishment.



Left: Earthenware figure of a kneeling archer, Qin dynasty 221-206 BCE. Museum of Terracotta Warriors and Horses of Oin Shihuang.

Below: Currency from different Chinese states that existed during the Warring States period. 481-221 BCE

1. Qin State, Bronze 2. Yan State, Bronze 3. Qi State. Bronze 4. Chu State, Gold 5. Han State, Bronze 6. Zhao State, Bronze 7. Wei State, Bronze





Left: Map showing Xi'an, China, where the Terracotta Army is found.

Below left: Earthenware horse figure. Oin dynasty, 221-206 BCF Museum of Terracotta Warriors and Horses of Qin Shihuang

Below, right: The shrine within Co Loa Citadel, Vietnam.

he First Emperor's sudden victory was impressive. But his ideas owed more than a little to his predecessors. The efficiency of his armies and many of his civic innovations were based on practices that several of his ancestors had initiated—the dukes and later the kings of Qin, some of whom were almost as remarkable as he. Qin began as a peripheral land situated in the "far west" of the Chinese world. Its rulers gradually established a strong, centralized state, moving their capital farther east as they manoeuvred for position and power during the turbulent later centuries of the failing Eastern Zhou dynasty (771-256 BCE). The rulers of Qin proved adept at organizing society such that everyone had a place and an interest in it, even while it remained fundamentally hierarchical. And it was the rulers of Qin who began the practice of interring terracotta figurines to serve them in the afterlife. Previously, sacrificed human servants were sometimes buried with the deceased.

Despite his lust for power, the First Emperor, like his ancestors, seems sincerely to have wanted to improve the wellbeing of his subjects. To facilitate commerce, the weights and measures, the currency, and the writing system of the Qin kingdom now became the standards of the whole empire. To improve communication and transport, the government built an extensive network of roads and canals. To protect China's northern frontier against nomadic marauders, the government constructed extensive earthen walls, creating a precedent for the later Great Wall.



THE VIETNAMESE CONNECTION

A chance visit to an ancient citadel helps a ROM archaeologist connect the dots to China's First Emperor

BY CHEN SHEN

In early December, I was in Hanoi, Vietnam, for an archaeological conference. The organizers took us to visit Co Loa, probably the most ancient citadel in Vietnam. On the outskirts of Hanoi, the citadel built by King An Duong Vuong in the late 3rd century BCE was the first capital of the Au Lac State, as Vietnam was then known. The visit brought home for me the fascinating connection between Vietnam and China's First Emperor.

I knew from Vietnamese history that Au Lac had been conquered by China in the 3rd century BCE and had remained under Chinese rule for 1,000 years afterwards. But I felt fortunate to see for myself a name—Zhao Tuo—on a shrine within the citadel, confirming that it was the army of China's First Emperor that had defeated Au Lac's King Vuong in 208 BCE. I'd read Sima Qian's comprehensive writings many times and immediately recognized the name Zhao Tuo—he was the general that the First Emperor had sent to conquer lands in what is now China's southernmost mainland.

Vietnamese history has always referred vaguely to "Chinese invaders," so seeing Zhao's name on the shrine in Co Loa confirmed for me that it was indeed First Emperor's own general who had conquered Au Lac. Sima Qian, the great historian of the Western Han dynasty, records that the land of Au Lac State belonged to Xiang jun, one of the 46 jun administrative districts comprising the Qin dynasty (Sima recorded only 36, but more have since been recognized). After the Qin dynasty had been overthrown by the Han, the First Emperor's loyal general, Zhao Tuo, declared independence temporarily for the region he controlled in southern China, including Au Lac.

This connection with Vietnam made me think about another detail I had come across a few years earlier. In 2003, archaeologists found a mass grave about 500 metres from the terracotta warrior pits. The dead were prisoners aged 15 to 35. Scientists have examined DNA from the bodies and determined that some are non-Han Chinese, and probably belong to today's ethnic minority residing in the far south. So, it seems that the defeated Vietnamese King An Duong Vuong's soldiers may well have been sent to serve as heavy labourers in the building of the First Emperor's tomb.





THE RISE OF THE STATE OF OIN

These artifacts help to document the long road to power of the Qin state, from a marginal, unimportant lordship in the 9th century BCE to the Empire of China in 221 BCE



Bronze bell of Qin duke, the Springand-Autumn period, 771–481 BCE. The Baoji Bronze Museum.

SOLDIERS OF FORTUNE

The 2,000 life-sized warriors and horses unearthed near the massive tomb complex of China's First Emperor continue to reveal knowledge about the Qin dynasty

For 2,000 years, the life of China's First Emperor has fascinated Chinese historians and storytellers. The source of their knowledge is Sima Qian (145-87 BCE), the great historian of the Western Han dynasty, who, about 100 years after the emperor's death completed an opus in 130 chapters covering 3,000 years of history, The Records of the Grand Historian. In one chapter Sima Qian explicitly describes the First Emperor's life and his ambitions to unify China. Sima's writings, inked onto thousands of bamboo strips, tell us most of what we know about this warrior emperor.

Today's historians and archaeologists do not doubt the credibility of Sima Qian's words—his records have been verified by numerous archaeological discoveries. Yet, clearly his work was not entirely comprehensive. Nowhere, for instance, does he mention the existence of the 8,000 full-sized terracotta warriors that were buried near the First Emperor's massive tomb complex.

Did Sima know of this massive pottery-making project? No one at all in China's history ever recorded the existence of these marvellous underground sculptures. It wasn't until 1974, when local farmers, the Yang family, began digging a well in the area, that the terracotta warriors were discovered. When first revealed, the fierce pottery faces terrified the Yangs. But once archaeologists began to dig further, the elaborate and individualized details of the uncovered figures, still in excellent condition, and the sheer magnitude of the find wowed the world.

Full-sized clay human figures and even fullsized horses like these had never been uncovered anywhere. A single pit was as large as a soccer field and there were not one, but three separate pits. It seems barely credible that such an undertaking would not have been remembered 100 years later, but I do think Sima Qian would have been surprised by the finding. Perhaps the First Emperor was very good at keeping a secret.

BY CHEN SHEN

In 1975, conservation concerns for the terracotta figures forced archaeologists to stop the dig. A museum was built over the site and opened to the public in 1979. This was China's first on-site archaeological museum. Safe from the ravages of weather, excavation resumed, on view to the visiting public, and the uncovered terracotta figures became a permanent display. In June 2009, a new multi-year excavation session began, so visitors can still view on-site excavation at Pit No. 1. New findings continue to emerge from the ongoing dig. The exhibition The Warrior Emperor and China's Terracotta Army opening at the ROM in June, will display such recent discoveries as a bronze bird recovered from an underground garden, civic officials, and an acrobat entertainer—every one of them full-sized—as well as a suit of stone armour and a helmet.

Fewer than 2,000 of the estimated 8,000 warriors and horses have been unearthed, but these have been enough to reveal many details about the First Emperor's army that were never recorded. We now know the formation and ranking system of the army. And the individuality of features on each warrior, including facial expressions and hairstyles, allows us to understand the personality and dress code of Qin soldiers. Conservation techniques applied to the most recent excavations even allow us to see the original colours of the paint on the figures. For the first time in the more than 2,000 years since the death of the First Emperor, we know that the most popular colour of the Qin army's battle robes, tunics, and pants was green (each soldier supplied his own clothing), but there was also red, purple, and blue.

A project of such magnitude must have required careful design and skillful management. On most of the figurines, archaeologists have found inscriptions with the name and place of origin of the master craftsman: 87 different names have been recorded. We estimate that each master supervised five to ten associated workers (or slaves), which would mean that 500 to 900 people worked on the 2,000 figures that have been unearthed. Impressive as those numbers may be, they represent only a tiny fraction of the number that worked on the First Emperor's massive tomb complex



2 Earthenware and lacquer food vessel, the Spring-and-Autumn period, 771–481 BCE. Shangluo . Municipal Museum.



3 Jade pendant set, the Spring-and-Autumn period, 771–481 BCE. Long Xian County Museum.



Stone helmet, Qin dynasty, 221-206 BCE. Shaanxi Institute of Archaeology.



nquestionably a warrior, the First Emperor was comfortable with violence. He commanded an army of hundreds of thousands and founded perhaps the largest empire in the world at that time. Nonetheless, the worst stories about him are probably exaggerated. His regime's antagonism toward Confucianism likely sprang from the philosophy's challenge to his own lack of respect for tradition. As one Confucian scholar declared at the time, "I have yet to hear of anything able to endure that was not based on ancient precedents." Given that many of the First Emperor's policies were quasi-revolutionary, such an attitude was unacceptable.

In the interest of stabilizing the fledgling empire, the new imperial government also wanted to erase the memory of the Warring States. So, the reported destruction of both Confucian and historical texts may well be accurate. Historical reports also assert that the state spared writings considered useful, such as those on agriculture, medicine, and divination—and indeed some have survived. Were scholars buried alive as a lesson to others? The answer is uncertain, but think of tyrannies in the modern era.

Beyond the First Emperor's great ambition, though, we really know little about the man himself. We have no likeness of him, no writings by him, and no certain way to separate the truth from the fiction that ancient historians propagated about him. But consider his title, Qin Shihuangdi: "Qin" was the name of his original kingdom. Now all of China had become Qin and, in a sense, he too was Qin. "Shi" means first; he intended to sire a long lineage of monarchs. "Huang" means majestic, august. "Di" is a difficult word whose meaning changed over time, but it nearly always connoted divinity. So we can be fairly certain that the First Emperor believed not only that he had inaugurated something unprecedented, but that he possessed the status of a god.

Given this context, we can more easily understand the First Emperor's extraordinarily elaborate and extensive tomb complex. The Terracotta Army is but one component—an amazing and significant one, to be sure—of a much grander scheme. Archaeologists and scholars now believe that the First Emperor aimed at nothing less than the recreation of his world in the afterlife. He would be a cosmic monarch, in keeping with his divine status, in touch with both the heavens and the earth. This would explain the ancient report that he replicated both the night sky and the geography of China in the main chamber of his mausoleum. And his Terracotta Army would ensure his autocracy in the hereafter, just as his actual army secured his power in the land of the living. However he conceived of life after death, the First Emperor surely believed that, when he entered the afterlife, he would be forever able to summon the Terracotta Army to serve him.

After his death, the succeeding Han dynasty continued to enforce most Qin policies, even while denigrating its dynastic predecessor. The benefits of strong government, rational administration, and standardization were too evident to jettison. And in their burial practices, too, the Han tended to imitate the Qin. Although no emperor ever again attempted to create a life-sized ceramic army, the Han rulers did include smaller versions in their tombs. Some Han practices may offer clues to what archaeologists might find in the First Emperor's mausoleum, should it ever be excavated.

The relatively peaceful, culturally rich times of the Han are well remembered in China, so much so that, to this day, ethnic Chinese people refer to themselves as Han. Yet the groundwork for that era was laid by the First Emperor: autocrat, founder of China, and creator of the Terracotta Army-one of the most intriguing archaeological discoveries of all time. o



Left: The tomb of historian Sima Qian is still worshipped by many visitors in his hometown of Hancheng, near the Yellow River.

Above, right: The First Emperor's tomb mount.



A PALACE UNDERGROUND

The tomb mount of China's First Emperor is said to hold heaven and earth

BY CHEN SHEN

It's awe-inspiring to think that the Terracotta Army is just a small part of the First Emperor's tomb complex. Located more than a kilometre west of the Terracotta Army pits, the First Emperor's tomb complex is the size of the University of Toronto's St. George Campus. It is the largest tomb complex in China, larger even than the great pyramids in Egypt. Inside the double walls are some 500 accompanying burials, including pit burials of horses, workmen, and other terracotta pieces, and the remains of many funerary temples.

According to Western Han dynasty historian Sima Qian, 700,000 people worked on the tomb complex for more than 37 years. Today's historians put the general population of central China at the time at about 20 million, so labourers must have come from all across the Qin Empire. Massive grave sites and various housing structures for the labourers recovered near the tomb by archaeologists suggest that there were different classes of workers—master craftsmen, technicians, and heavy labourers, as well as prisoners and slaves. Inscribed clay tablets found at the grave sites indicated that some laborers came from as far as 1,000 km away on the east coast.

The mount itself has never been excavated. Perhaps based on stories handed down and embellished over time, Sima Qian (translated here by Burton Watson) described the underground palace where the body of China's First Emperor rested:

Replicas of palaces, scenic towers, and the hundred officials, as well as rare utensils and wonderful treasures, were brought to fill up the tomb. Craftsmen were ordered to set up crossbows and arrows, rigged so they would immediately shoot down anyone attempting to break in. Mercury was used to fashion imitations of the hundred rivers, and Yellow river, the Yangtze, and the seas, constructed in such a way that they seemed to flow. Above were representations of all the heavenly bodies, and below, the features of the earth. Man-fish [possibly whale] oil was used for lamps, which were calculated to burn for a long time without going out.

Because of the importance of the tomb as a national monument and the desire to preserve it and keep its exact location secret, the tomb mount will likely not be excavated any time in the near future. So for now, we shall have to take Sima Qian's word for what lies within.







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When Christian Dior's extravagantly feminine New Look burst upon the fashion-starved post-World War II scene, it was hailed as a triumph. But not everyone accepted it. A glimpse into the rise of—and shock waves caused by—a fashion icon.

> By Alexandra Palmer Excerpt from Dior: A New Look, A New Enterprise (1947–57)

In 1935, at the age of 30,

Dior entered the world of fashion as a freelance designer. Three years later, he landed a job at the couture salon of Robert Piguet, who hired him as a modéliste, or designer working under the head of the house. After the war, Dior joined couturier Lucien Lelong, who served as president of the Chambre Syndicale de la Couture Parisienne, representing Parisian haute couture during the war years.

hristian Dior had expected to work for Lelong for the rest of his life because he valued his secure job and was worried about the 'risks of going into business'. Then, unexpectedly, the dream of his own couture house was realized France's 'cotton king', Marcel Boussac, the richest man in France.¹ Boussac, who had opened his first textile company in 1911, had profited from the First World War and now the Second, making Groupe Boussac the largest French textile manufacturer, with 15,000 employees. In July 1946 he proposed that Dior revitalize one of his businesses, the haute couture house of Philippe et Gaston.² Dior turned down the offer because the idea of battling entrenched hierarchies and extricating an old-fashioned and rundown house from its early twentieth-century

Instead, Dior very clearly articulated a proposal for an entirely new establishment. His ideas were fuelled by his experience at Piguet and Lelong, by Balmain's success and perhaps too by his close friend, Christian Bérard. In 1946 Bérard was in New York and learned that American dress designers considered Paris 'washed up' as a fashion centre. Reportedly, he is no other way. You must be Joan of Arc!'3 Dior had two objectives, artistic and nationalistic. His house would be small and very exclusive, attracting the most elegant women in the world. It would be a temple for upholding and demonstrating the centuries-old French traditions of luxury textiles, beading, embroidery, dressmaking techniques and design, and prove that Paris was the most technically superb, luxurious, artistic and dominant source for fashion in the world. By doing this, the city would reassert its cultural importance for fashion and demonstrate that France – and particularly not America – was the source of creative fashion as it had been since the late seventeenth century.

roots was exactly what he was tired of at Lelong. told Dior to sketch a plan of action, saying: 'There



By the summer of 1946 word was out that Boussac was backing Christian Dior and 'the smell of fame was strong'. The opening of the new house was announced in the US in the winter of 1946 in Women's Wear Daily, and in French Elle in January 1947.6 Dior had a respected reputation as a *modéliste*, but the news that he was opening his own establishment and was backed by Marcel Boussac generated enormous excitement. Christian Dior did not disappoint.

The house of Christian Dior was installed at 30 Avenue Montaigne. Dior was a perfectionist and wanted décor that would 'not distract the eye from my clothes, which after all were to be the focal point of the proceedings'... The immaculate, freshpainted rooms with a patina of French history created by the neo-Louis XVI décor excited buyers, press and public alike. They were fascinated to experience a new mood that could blow away the wartime cobwebs.

On 12 February 1947 Dior unveiled his extravagant first collection in an atmosphere of supreme elegance. Invitations for the opening were coveted and even sold on the black market. Jacques Rouët recalled that an hour before the show 'a ladder, pinched from a nearby construction site, was placed against the ground floor window and several young people happily climbed up and tried to force themselves inside'. 11 Guests were greeted on the stairs by formidable staff dressed in chic black uniforms. The aboyeuse or barker called out the name and number of the model entering the room, in English and French. The presentation was dramatic, as one reporter recalled:

Paris couturier with a professional businessman, quickly becoming a celebrity coutur ier. His private and public life attracted much interest and from 1947-57 he was constantly photographed

Christian Dior linked the artistic The first girl came out, stepping fast, switching with a provocative swinging movement, whirling in the closepacked room, knocking over ashtrays with the strong flare of her pleated skirt, and bringing everyone to the edges of their seats in a desire not to miss a thread of this momentous occasion . . . We were given a polished theatrical performance such as we had never seen in a couture house before. We were witness to a revolution in fashion and to a revolution in showing fashion as well.12

The New York Times called the collection 'youthful' and 'graceful'. British Vogue credited Dior with reviving interest in 'a somewhat uninspired season... his ideas were fresh and put over with great authority, his clothes beautifully made, essentially Parisienne, deeply feminine'.13 Album du Figaro noted that 'for the first time in years there is finally a style!' and published a guide to the hemlines, busts and shoulders. Carmel Snow's detailed and euphoric reports for Harper's Bazaar were enormously influential. It was she who dubbed the style the 'New Look', sending American buyers rushing to Paris to see what they had missed, since only 18 had attended the Paris collections. One commented: 'God help the buyers who bought before they saw Dior!' In November, when Pierre Gaxotte of the Académie Française returned to Paris from New York, he announced: 'Do you know that the two most famous Frenchmen in the United States are General de Gaulle and Christian Dior?'15

ut when Christian Dior's New Look burst upon fashion-starved post-war women, his image of femininity, which reigned supreme during the 1950s, did not make them blush. It was a revelation of beauty and luxury, with long, full, fluid skirts, cinched-in waists and soft shouldersthe antithesis of militaristic wartime fashions.

But not everyone accepted the New Look. A few days after the first showings of Dior's collection, while American photographers were shooting the designs in Montmartre, sales ladies from the Quatre Saisons 'leapt forward and tore apart the dresses'. This was the first protest, and photographs of women ripping at the model's skirt published in Paris Match began the start of organized anti-New Look protests.19

Christian Dior himself encountered negative reactions to the New Look later in 1947. On his first American trip, he was promptly whisked away from a Chicago train station as 'embattled housewives brandishing placards bearing the words: "Down with the New Look," "Burn Monsieur Dior," "Christian Dior Go Home" advanced'. Chicago was not unique. In Louisville, 1,265 women believed that the New Look was not only impractical but also anti-feminist, and signed an anti-Dior petition as members of The Little Below the Knee Club. In Oildale, California, Mrs Louise Horn gave a timely demonstration of the dangers lurking in the New Look. As she alighted from a bus, her new long, full skirt caught in the door. The bus started up and she had to run a block alongside it before she was freed. In Georgia, a group of outraged men formed the League of Broke Husbands, hoping to get '30,000 American husbands to hold that hemline'.

Christian Dior's first presentation astonished in the new smart salon with his mannequins wearing full, long skirts that brushed the audience during the fast-paced theatrical presentation.



ven in 1948 the style was still controversial. New Liberty magazine ran an article entitled 'What's Happened to the New Look?' It stated that 'In style-conscious Paris only models and wealthy society women could afford to wear it. The average woman preferred to buy food', and that 'In Russia, it was

banned as "an example of the deterioration of American capitalism".' This was accompanied by photographs showing local reactions to models wearing the New Look on Paris streets, and included a Paris housewife in a vegetable queue giving the New Look 'a dirty look', while another told the model wearing a Christian Dior that it was 'impractical'.²²

Fashion manufacturers in Europe and North America were not ready for Christian Dior's vision and were left with outdated fashions: they were furious because the New Look was not being replicated quickly. Wartime restrictions were still in place in Europe, and the styles required too much material, new patterns and a reassessment of production and costs. Customers could not readily transform the slim-fitting, knee-length, wartime skirt into a New Look one, though women were resourceful. Some added a yoke to an existing skirt in order to drop it to the hips. One found the required fabric in bed sheets that she dyed black for her ankle-length skirt. But, as another pointed out, the implications went beyond just the amount of textile, and she was shocked at the price of the alterations for her first New Look-style purchase because it took so much time. Even if a woman managed to create the New Look successfully, it was not always recognized as the height of fashion. As one woman recalled, when she was in a department store wearing her home-made version of a long New Look skirt, a gentleman wryly remarked: 'Excuse me for not wearing my dinner jacket!'23 Women read articles that answered questions such as 'What is the New Look? What about shoulder padding?', or announced that 'You Can't be a Last-Year Girl' because,

Fashion is shaken at the foundation. Visualize yourself as you looked on a beautiful autumn day last year. There's not much of the picture that survives. Not the hemline, waistline or the shoulderline . . . If you're not a Last-Year Girl. You'll like the feel of a longer, fuller skirt flowing around you as you move . . . You'll enjoy having hips again — without apologies; and the satisfaction of a small, rounded, tapering waist and of having it show in the snug bodice tops. You can have it all.²⁴

While reporters were kept busy explaining how and why women could or would not adopt the New Look, others considered the financial implications. In spring 1948 French *Elle* showed dresses by Dior, Balmain and Balenciaga and compared the price of each in terms of what France could purchase from abroad with their sales: 9,800 bags of wheat, 3,000,000 kilograms of wool and 789,000 kilograms of meat. Haute couture was thus clearly shown as an important financial export, whilst also promoting French culture and an image of national femininity. ²⁵ Regardless of controversy, the fact remained that from its inception the New Look dominated post-war fashion design at all prices.

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The New Look firmly secured the name of the house of Christian Dior in the mind of the public, as well as the fashion world. In fact, all Paris collections were measured and revitalized by it. ... As Carmel Snow so famously quipped: 'Dior saved Paris as Paris was saved by the Battle of the Marne.'²⁸ ○

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Excerpted from the book Dior: A New Look, A New Enterprise (1947–57) by Alexandra Palmer (V&A Publishing, 2009) available in the ROM Museum Store and online.

Motos

- Pochna, Bonjour, Monsieur Boussac, pp,17.9; Dior, Talking about Fashion, p.27
- Pochna, Christian Dior, p.88, emphasizes that it was Dior's artistic ambitions and frustrations, rather than a quest for fame or interest in business that interested him. Philippe et Gaston was founded in 1925
- ³ Bébé, *Time* (9 May 1949). The article notes that Bérard's friends believed he was the rea begetter of the 'New Look
- 5 Ballard, In My Fashion, p.233,
- ⁶ Scrapbook, Christian Dior Heritage
- ¹¹ Quoted in Réthy, Christian Dior, p.8.
- ¹² Ballard, *In My Fashion*, p.237 New York Times (15 February 1947), p.8 British Vogue (April 1947), p.47
- · Snow, *The World of Carmel Snow*, p.117 ¹⁵ Time (4 March 1957), p.34; Réthy,
- ¹⁹ Réthy, Christian Dior, p.8. It has been suggested that this protest was a clever press stunt by the house
- ²² New Liberty (28 February 1948), p. 8
- ²³ Audience comment at the Textile Endowment Fund lecture by Palmer in 1997 at the Royal Ontario Museum; author's interview with Clayton Burton (1991) The centerpiece of the autumn 1947 collection 'Diorama' had a circumference of 40 metres Dior, Christian Dior and I, p.71
- · Harper's Bazaar (August 1947), p.95
- * Quoted in Weiner, Les Enfants Terribles, p. 31
- 28 Snow, The World of Carmel Snow, p.58

Below: Christian Dior's visit to Chicago in autumn 1947 galvanized feminists, who demonstrated against the New Look.



Photo: © Bettmann/COKBI



The framework of the book is derived from new concepts for the kingdoms of life. This grand context for all living things opens the way to comprehending the genesis of photosynthesis, and the

fuelling of life from the energy of sunlight.



THE PLANT KINGDOM

It is easy to forget that plants intercept and repackage the energy of sunlight, thereby supporting the existence of other organisms, including people. Photosynthesis produces not only the food energy that sustains the living world, but also the oxygen on which much of life depends-all because of the magical molecule chlorophyll. Consequently, one premise of this book is that some appreciation of the diversity and history of plants is a worthy objective for curious observers of the natural world. The major groups of plants are discussed using examples on the old farm.

The oldest and most primitive groups of plants, such as ferns, horsetails, clubmosses, and liverworts, are survivors of lineages that can be traced through a fossil history reaching back in time for 300 to 400 million years or more. All these primitive plants reproduce through spores

disseminated by wind. Plants reproducing from seeds originated later.

Beginning some 300 million years ago, a lineage of seed plants gave rise to conifer trees, such as today's pine and spruce. But the real successes among seed plants were the flowering plants that now blanket the land. Flowering plants first appeared in the fossil record about 130 million years ago and flourished, rather quickly by geological standards, to change the face of the planet.

Common examples of these highlights in the history of plants are identified on the old farm, including some unusual flowering plants that manage pollination under water. Also in water are carnivorous plants, and duckweeds, which include the smallest flowering plants in the world.

THE ANIMAL KINGDOM

Insects and other invertebrates make up by far the largest part of the animal kingdom. More than a million species are now recognized by science, although it is estimated that millions more are still to be identified. By contrast, vertebrate animals comprise only some 42,000 living species. The natural world would survive without vertebrate animals, but without the ecological services of insects and other small organisms, it would implode.

The book offers notes drawing to the attention of curious observers many of the common invertebrates living on the old farm, including sponges, snails, clams, worms of several sorts, bryozoans, spiders, harvestmen, pseudoscorpions, mites, crustaceans, centipedes, and millipedes. The major groups of insects are identified, illuminating their varied ecological roles; and the biological significance of complete and incomplete metamorphosis among insects is emphasized.

The most impressive creatures on the farm, in terms of their ancient origin, are fairy shrimp, which have an incredible fossil lineage of 500 million years! Fairy shrimp live only in temporary vernal pools, where they have survived through all the major episodes of global extinction that eliminated so much of early life. It is no small paradox that some of the most remarkable animals of the natural world are passed by unnoticed in roadside sloughs.

Dragonflies are superbly agile in flight as they capture small insects on the wing. Larvae are predators in water. These ancient creatures originated some 250 million years ago.

Freshwater sponges are colonial animals growing in irregular patches on submerged logs and rocks. Frequently they are green in colour because algae grow



Previous page:
Tiger beetle.
This page:
Duckweeds grow on the surface of still waters.
Three species are shown here, including globules of watermeal 1 mm in length—the smallest flowering plants in the world.

• THE FUNGAL KINGDOM

Many fungi occupy the hugely important ecological niche of accelerating the degradation of dead organic matter, which releases nutrients bound up in dead plants and animals, making them available to be taken up by other forms of life. Other fungi, in the form of mycorrhizae, play an important role in plant nutrition, aiding plant roots to absorb nutrients.

Not widely recognized, however, is the role of fungi in the formation of lichens. Common on rocks and trees, and on the ground, too, lichens are symbiotic partnerships between photosynthetic algae and the durable tissues of a fungus.

Lichens grow abundantly on rocks, trees and on the ground. They are symbiotic partnerships photosynthetic growing within the durable

fungus



THE PROTISTAN KINGDOM

The most conspicuous protistans on the farm are the planktonic suspended algae that undergo seasonal bloom in the lake at the back of the property. In the deep waters of lakes where rooted plants are unable to grow because sunlight does not penetrate to the bottom, it is the protistan community of planktonic algae and protozoa that underlies the lake's productivity.

Through photosynthesis, these freshwater algae also contribute to the supply of atmospheric oxygen. In fact, planktonic algae in the world's oceans convert large amounts of atmospheric CO2 through photosynthesis into organic tissue, and as a byproduct produce more than 25 per cent of the oxygen supply of the entire planet—the equivalent of all terrestrial rainforests combined.

Most algae consist of a single filamentous forms stoneworts are the algae that terrestrial plants

THE BACTERIAL KINGDOM

Bacteria are by far the most abundant forms of life on Earth; they occur just about everywhere and are intimately involved in fundamental biological processes.

Bacteria are distinguished from other life forms because their cells lack nuclei. That is why "blue-green algae" are classified as bacteria despite having chlorophyll; their proper name is cyanobacteria (from the Greek kyanos, meaning dark blue).

Cyanobacteria are among the few bacteria large enough to be seen with the unaided eve, and in late summer the lake at the farm produces a bloom of cyanobacteria suspended in the water. Many other smaller cyanobacteria occur in lakes, and all of them produce their own food through photosynthesis.

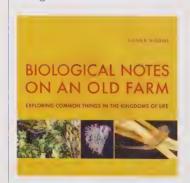
A few billion years ago cells of certain small cyanobacteria were taken up by free-living host cells of some other bacteria in a symbiotic relationship to become the chlorophyllcontaining chloroplasts found in algae and later in plant cells. This was the launch of photosynthesis, which in the fullness of time enabled algae and then plants to capture the energy of sunlight to fuel life on Earth and to produce the oxygen that now sustains most of the living world. Cyanobacteria may well have been the most important organisms ever to appear on Earth.



Cyanobacteria are photosynthetic chlorophyll and living in water, but because their cells different forms.

Common organisms throughout the kingdoms of life may be small, but they play pivotal roles in the ecology and evolution of the living world. o

GLENN WIGGINS is curator emeritus in the ROM's Department of Natural History and author of Biological Notes on an Old Farm.



Biological Notes on an Old Farm. Exploring Common Things in the Kingdoms of Life is available online, in libraries and bookstores, and in the ROM Museum Store.

Friend or Foe?

The good, the bad, and the smelly of invasive lady beetles

BY ANTONIA GUIDOTTI



ast October, many Ontarians were surprised by the huge numbers of lady beetles that were seen in and about their homes. Commonly known as ladybugs, the lady beetle or ladybird beetle is actually not a bug, but a beetle with chewing mouthparts. Another misconception is that there is just one species. But over the last 150 years, approximately 80 species of lady beetle have been recorded from Ontario alone.

The one that was seen in large numbers last fall was the non-native multicoloured Asian lady beetle (*Harmonia axyridis*). Since it was first recorded in Ontario in 1994, it has become the most commonly seen species. Its appearance can be quite variable: it can be yellowish, orangey, black, or red in colour and may or may not have dots, but it always has a large, dark M-shaped mark on the pronotum (the part between the head and body).

The significant number of lady beetles in Ontario may have been the result of an abundance of aphids early last summer. By mid-August, as the lady beetle population peaked, the aphid population crashed. The lady beetles served as a natural bio-control, meaning that farmers did not need to apply pesticides to control the aphids. In August 2001, when soybean aphids exploded into Ontario, the population of multicoloured Asian lady beetles responded quickly and their numbers were impressive that fall as well.

Although many people consider them a nuisance, multicoloured Asian lady beetles are good at controlling aphid pests. A single lady beetle can eat hundreds of aphids in its lifetime. Most other lady beetle species are also efficient aphid predators, though a small number feed on plants or fungi.

A striking behavioural characteristic of most lady beetles is the formation of overwintering groups. In North America, aggregations of native lady beetles have been reported on lakeshores for many years. It is not clear exactly why or how they know to gather in a particular spot. Whatever the reason, they don't stay at the shore, but seem to use it as a meeting place to gather as they prepare to migrate elsewhere. How far they migrate and where exactly they go is a bit of a mystery. Most likely they find a nice warm spot in woods, forests, or sheltered valleys.

The multicoloured Asian lady beetles in our houses last fall were also seeking a warm place to hibernate. Most Canadian species hibernate under leaves or in sheltered spots, either alone or in groups, but mostly outside. But the multicoloured Asian lady beetle, being non-native, needed to find a way to survive our cold Canadian winters. As the species moved northward in North America, it had to find sheltered areas to hibernate, places where the temperature doesn't drop below -5°C. The walls of our homes and garages are ideal.

In its native Asia, this lady beetle looks for cliff faces or cracks and crevices in which to hibernate. In Ontario, the species looks for a dry, warm place on a south- or west-facing wall (they are warmest) and begins to gather there. The beetles require an optimum overwintering temperature of between 0° and 5°C. At -5°C,



Handling Messy Houseguests

Large numbers of multicoloured Asian lady beetles in your home may cause a slight odour problem, may stain surfaces when crushed, and can occasionally cause an allergic reaction. The yellow, toxic juice that they squirt out of their leg joints is a defense mechanism that they use when disturbed. It is stinky and tastes bad (so I'm told). If these lady beetles are congregating in your home and you are determined to remove them, it is best to vacuum or sweep them up gently.





Natives

The two-spotted (Adaha dipunctata) shown here and thirteen-spotted common of native lady beetle species and you may occasionally see these



Invasives

harleguin for the many different polarations individuals exhibit or Hallowe'en. because it invades houses in October—and the seven spotted (Coccinellaseptempunctata) lady beetles have become quite common since they immigrated to Ontario. The United States imported the multipoloused Asian



Casualties of Invasion

The seven-spotted beetle (Coccinella septempunctata) shown have is a recent arrival to Ontario. Since then, the nine-spotted lady beetle (Coccinella novermotate) may have been extripated from the province.

they become paralyzed, and they cannot survive temperatures of -20°C. They have a 25 to 50 percent survival rate inside a building, and none if they remain outside.

While introduced species can be efficient at controlling aphid populations, their effect on the overall lady beetle diversity has been considerable. Of the 80 species recorded from Ontario, only a small fraction have been seen in the last 10 years. One example is the nine-spotted lady beetle (Coccinella novemnotata), which has not been collected or photographed in Ontario since 1990. It was about that time that the seven-spotted species (*Coccinella septempunctata*) another non-native, was introduced. The nine-spotted lady beetle is probably extirpated at least from southern Ontario.

The Lady Beetle Survey, undertaken by the Canadian Nature Federation and wrapped up in 2000, showed a decline in the populations of many native lady beetles. The rise and spread of the multicoloured Asian lady beetle has been significant since then, so the decline in native species now could be even greater.

Whether we like it or not, this invasive species is here to stay. When you next find multicoloured Asian lady beetles in your house, what you do about it will depend on whether you see them as an ally against pests in your garden or as a threat to Ontario's dwindling biodiversity. For my part, lady beetles will continue to be a welcome presence in my garden, regardless of species. o

ANTONIA GUIDOTTI is a technician in the Entomology section of the ROM's Department of Natural History.

FOR FURTHER READING The University of Guelph's website uoguelph.ca/debu/ lady/lady-beetles.htm lists brief descriptions of several lady beetle species found in Ontario Multicoloured Asian lady beetle.

BY JAMES CHATTO



In China for the 2008 Olympic Games, I took the inevitable side trip to the ancient capital of Xi'an to see the revenant Terracotta Army of Emperor Qin Shihuang. Xi'an stands at the centre of Shaanxi, a vast province that encompasses the snow-capped Oinling mountains in the far north, lacquer trees and wild pandas in the south, and famously fertile wheat prairies. This is the heartland of Asian noodledom, so it came as no surprise to find noodles on offer at the Terracotta Warrior Museum cafeteria. The cook who prepared them was extraordinarily skillful. First he made hand-pulled ja mian, banging a rope of soft wheat dough onto a stainless steel table, then swiftly pulling and doubling and pulling again until one strand became 64, the hank of string-thin threads quickly drowned in a cauldron of boiling water. His other trick was to shave dao siao mian, holding a lump of dough in one hand at eye height, then slicing morsels off it with a razor-sharp trowel. Speed was part of the process—a master chef should be able to set up a rhythm where he is cutting one noodle while another is in the air and a third is hitting the boiling water. I couldn't help but imagine how easy it would be to lose most of a finger.

Made purely of wheat flour and water, the noodles tasted unabashedly plain, even when they were tossed in an oily stir fry

or served in a thin pork broth spiked with the local vinegar. But plainness can be a virtue in a dish one eats every day, and noodles have been northern China's staple starch for millennia—at least since the grindstone reached this part of the world, travelling west along the Silk Road a couple of centuries BCE, around the time the Terracotta Army was made.

Did the idea of noodles come with it? Patriotic Italian pastavores have long made that claim, pointing out that wheat came into vogue in China only once it could be ground into flour. A recent discovery should end the bickering. Archaeologists at the Lajia site in northwestern China have found actual noodles fortuitously preserved for 4,000 years beneath an upturned bowl. They are made of two kinds of millet, like the chewy "iron-wire noodles" still made in local households too poor to afford wheat, and their shape is strikingly reminiscent of modern, handpulled *ja mian*. It's intriguing to picture some late Neolithic cook expertly spinning strings of dough into a cauldron.

Close to Toronto, we have our own practitioner. Ken Sun works in an open kitchen at the Pacific Mall at Steeles and Kennedy. Chef Joshna Maharaj of the ROM's Food Studio has invited him to the Museum to demonstrate his skills. She will also be honouring the exhibition *The Warrior Emperor and China's Terracotta Army* by adding plenty of noodles to her menu as well as examples of Xi'an's other traditional specialty, dim sum dumplings. These are said to have been invented in Xi'an about 2,000 years ago by a doctor who made his medicine palatable by wrapping it up with pork inside a pouch of dough. I have no doubt there are Italians who will claim he got the idea from ravioli. o

JAMES CHATTO is a Toronto-based food writer, *Toronto Life's* food columnist, and editor of *harry* magazine.

To read more about China's Terracotta Army, see page 18.

Far Eastern Fashion

China's Terracotta Warriors bring Asian style to the ROM

BY DENISE DIAS

With the highly anticipated blockbuster exhibition The Warrior Emperor and China's Terracotta Army marching into the ROM in June, there's no better time to shop for fashionable Asian finds at the ROM boutique.

From delicate silk scarves and garments to handcrafted fine jewellery and décor items, we've assembled a stylish collection of exotic treasures from China and Japan. Here are a few elegant pieces that are sure to liven up your spring wardrobe. o

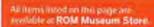
DENISE DIAS manages communications and social media strategies for the ROM Governors Office. She is a regular writer for Shedoesthecity.com and Toronto Life's style section.



OLD CHINESE MONEY PENDANT

Designed by Charles Albert, this large pendant depicts an old Chinese coin. \$99.99

Why we love it! A favourite among celebrities including Patti LaBelle and Maria Menounos, this designer and minerals in his work.



NAOMI GETA SANDALS

Store Hours: 10 am to 6:30 pm. except Friday 10 am to 10 pm. Kilda Store: Menday to Sunday Noon to 4 pm. Check out our on me soungue a store rom on ca

> **DRAGONFLY JACKET** Make a statement in this gorgeous, shimmering kneelength black jacket. \$199.99 Why we love it! This diverse piece can be worn day or night



GEISHA AT MOUNT FUJI SILK SCARF

Wear some art instead of advertising with a luxurious ZAZOU silk scarf that pays homage to renowned woodblock artist Katsushika Hokusai. \$59.99

Why we love it! The ROM houses a selection of woodblock prints by Hokusai in the Prince Takamado



NAOMI KIMONO CLUTCH

This cute and colourful Japanese clutch is handmade from vintage kimono fabric. \$49.99 Why we love it! It's spacious enough to carry all of your essential evening-bag items



ORIGAMI CRANE PIN

Add a burst of colour and culture to your outfit with this little handmade red-and-green paper gem by Robert Wu. \$19.99 Why we love it! The crane is a strong symbol of beauty in many world cultures.







Fun Facts:

Big Mama

The Tyrannosaurus rex dinosaur is known to be the king of the lizards. But did you know that T. rex bigger than the males? The Deep Unknown

Scientists know more about the surface of the moon than they do about the briny deep. The ocean floor is the final frontier for

In ancient Egypt, pillows were often

about 4.3 metresthat's 14 feet!—of







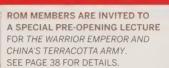
Schad Gallery of Biodiversity. ANSWER: I'm a giraffe weevil, Trachelophorus giraffa, from Madagascar. You can see me in the Life

members

The latest offers and information



NEWS / EVENTS / SUPPORT / PROGRAMS / TRAVEL / SPONSORSHIP





ROM GOVERNORS' MESSAGE

Funding the Future of the ROM

Our plans for an event-filled new season

Spring is upon us once again and with it the natural world comes to life. This is the time of year when we look forward to the summer sunshine and embrace the seasonal sense of new beginnings.

The ROM Governors office is moving forward from a very successful winter season in which we celebrated the triumphant close of the Renaissance ROM Campaign. We ended 2009 with so many high notes, and I wanted to sincerely thank all of you who supported us in these challenging economic times. We are now fundraising for exciting new priorities in the areas of accessibility, education, digital content, programming and exhibits, research and collections, and gallery development. We hope that in 2010 the ROM will become one of the world's most accessible museums.

We were delighted in early January to receive some generous support from the Federal Government, which will allow us to complete two new galleries at the Museum. A grant of \$2.75 million, generously matched by donors from the private sector, will help us complete the Eaton Gallery of Rome and the Joey

and Toby Tanenbaum Gallery of Byzantium. These funds will also support the newly revamped Bat Cave.

Event planning for the spring is also well under way. Our annual Young Patron's Circle (YPC) fundraising event, PROM V: NOIR, is taking place on March 27, 2010. This year's theme evokes the dark glamour of old Hollywood and promises to be another fantastic evening with proceeds supporting ROM priorities, including the School Visits Bursary Program. On April 20, 2010, we'll host an exceptional evening honouring William Thorsell, who officially steps down as the ROM's director and CEO in August. This event will raise funds for the newly established Director's Signature Series: The William Thorsell Forum, which we know will become one of the ROM's most celebrated annual lectures.

April is Nature Month at the ROM and with generous support from the Ministry of Natural Resources, we are offering special programming in the Life in Crisis: Schad Gallery of Biodiversity to celebrate the International Year of Biodiversity. Lectures and special events on this theme will bring live animals into the galleries to interact with the public.

We are also looking forward to the opening of The Warrior Emperor and China's Terracotta Army in June 2010. RPC and YPC patrons will have a first look at the exhibit on the evening of June 22, 2010. All members and patrons will have the opportunity to learn more about the exhibition from special digital presentations taking place in June—see the Member's news section for details. This extraordinary exhibit, generously sponsored by The H. N. Ho Family Foundation, BMO Financial Group, Cathay Pacific Airways Ltd., and Blake, Cassels & Graydon, LLP, promises to be another must-see show at the ROM.

Montgain

DR. MARIE BOUNTROGIANNI PRESIDENT AND EXECUTIVE DIRECTOR OF THE ROM GOVERNORS

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MEMBER INFORMATION

MUSEUM MEMBERSHIP RATES Individual: 1 year \$90; 2 years \$160 Family/Dual: 1 year \$139; 2 years \$250 Non-Resident: 1 year \$95; 2 years \$170 Student: \$50

Explorers: \$15 (in addition to ROM

Membership) Curators' Circle: \$175 Museum Circle: \$300 Director's Circle: \$600

Young Patrons' Circle: Single \$600;

Royal Patrons' Circle: \$1,500+

TELEPHONE NUMBERS Membership Services: 416.586.5700 Switchboard: 416.586.8000 Bell Relay Service: 711 School Groups: 416.586.5801 Museum Volunteers: 416.586.5513 ROM Museum Store: 416.586.5766 c5 Restaurant/Lounge Members Reservation Line: 416.586.8095

Donations: 416.586.5660

Attention Members: Your privacy is important to us. The Royal Ontario Museum (ROM) and the ROM Governors (the ROM's charitable foundation) share a special relationship and you may receive additional information from each. If you do not wish to receive it. contact membership@rom.on.ca or call 416.586.5700.

Occasionally, we make our list of supporters available to other carefully screened curatorial organizations and selected groups that may be of interest to you. Please understand that by allowing us to exchange your name, you are helping us support the ROM's education and research mandates. If you prefer not to have your name exchanged, please contact us at membership@rom.on.ca or at 416.586.5700.

The ROM Membership Department operates a telemarketing office. Should you prefer not to be contacted by telephone, please contact us at the e-mail address or phone number listed below and we will have your number removed from our list

Membership/Bookings: 416.586.5700 membership@rom.on.ca rom.on.ca/members

NEWS & PROGRAMS

The Warrior Emperor and ROM Talks China's Terracotta Army

SPECIAL PRE-OPENING PRESENTATIONS FOR ROM MEMBERS

Join us for a lively digital presentation that

takes you behind the scenes of the exhibition The Warrior Emperor and China's Terracotta Army. Drop by on the day that suits your schedule.

Presentations take place on June 1, 6, 7, 9, 11, 12, 14, 16, 18, 20, and 21 at 10:30 am, 1 pm, and 3:30 pm. On June 11 and 18 an additional presentation takes place at 6:30 pm.

No registration required. First come, first served. The presentation in the Cleophée and Signy Eaton Theatre is free and exclusively for ROM Members. The exhibition opens in late June 2010.

Celebration for William Thorsell

HONOURING A DYNAMIC LEADER Tuesday, April 20, 2010

William Thorsell's visionary leadership through Renaissance ROM has transformed the Museum in groundbreaking ways. Over the past decade, William has helped dramatically revitalize the Museum, making it a more accessible and engaging place for all visitors, and garnering international recognition for the ROM as an integral part of Toronto's art scene and cultural renaissance.

In light of William's upcoming retirement as director and CEO, a special fundraising affair in his honour will be held on Tuesday, April 20, 2010, at the ROM in support of the Director's Signature Series: The William Thorsell Forum.

We invite you to join us for this special evening. For more information or to purchase tickets, please call the ROM Governors at 416.586.5772.

New Info Centre for Members

KEEPS ROM MEMBERS IN THE KNOW

Enjoying ROM Member benefits just got easier with the installation of a new Members Information Centre in the Museum's main lobby. Drop by each time you visit to pick up the most up-to-date information on current membership events, programs, and special offers. You can also get details on our very popular special-interest groups, such as ROM Explorers' Club for kids and ROM Friends, a variety of special affiliate groups within Museum membership.

Keep reading ROM magazine, Let's ROM, and the ROM's program guide for events and special perks for Members. You can also sign up for our free monthly Members' eNewsletter to receive the latest details on special Member offers, events, and programs. Call 416.586.5700 or e-mail membership@rom.on.ca to sign up.

TERRACOTTA ARMY INSPIRES THREE LECTURE SERIES

To enrich the understanding and appreciation of The Warrior Emperor and China's Terracotta Army, the ROM is offering a compelling series of lectures and events.

The Genius of China Lecture Series

Fourteen academic lectures will highlight the achievements of China throughout history and explore the country's rich cultural legacy and contributions

The Director's Signature Lecture Series

Four high-profile speakers, including Deepak Chopra and Simon Winchester, will take to the podium.

Life in the Afterlife

This three-day symposium, sponsored by Mount Pleasant Group, will explore different perspectives on the afterlife, including cultural and societal differences, similarities, beliefs, traditions, and practices. Featured speakers: ROM curators and other renowned scholars from Canada and abroad.

For tickets and details, visit rom.on.ca

Friends Events

Friends of the Canadian Collections Annual Meeting and Lecture

Wednesday, May 26, 2010, 2 to 4 pm

Exclusively for FCC Members

Join ROM ethnologist Dr. Trudy Nicks for a lecture about the work of artist Jane Ash Poitras, the subject of an upcoming ROM exhibition.

Call 416.586.5700 or go to rom.on.ca/whatson.



Friends of Textiles and Costume Annual Meeting

Friday, May 28, 2010, 5 to 7 pm

Exclusively for FTC Members.

Curatorial staff will tour and discuss the new exhibit in the Patricia Harris Gallery of Textiles and Costume.

Registration required. Call 416.586.5700 or go to rom.on.ca/whatson.



Don't forget to pick up a copy of the exhibition guide to The Warrior Emperor and China's Terracotta Army. Available June 1.



Friends of South Asia in collaboration with inDANCE

Solo Dance Perspectives from South India and Beyond

Friday, June 4, 2010, 10 am to 9 pm Saturday, June 5, 2010, 10 am to 5 pm Signy and Cléophée **Eaton Theatre**

The Friends of South Asia, in partnership with inDANCE, one of Canada's leading South Asian dance companies, presents a two-day symposium exploring the form of solo dance as practiced by courtesans in South India until the beginning of the 20th century.

Bharatanatyam's complex, modern past-inflected by the colonial experience, Indian nationalism, reform movements, Orientalism, and globalizationspeaks to a number of highly topical aesthetic and political issues in today's art world. This event will bring together scholars and practitioners of solo dance from around the world, featuring live performances by leading practitioners. Participants include Canadian dance legend Peggy Baker, UCLA professor Janet O'Shea, and dance exponent Anita Ratnam from India.

Generously supported by the Ancient Echoes/Modern Voices: South Asia Programs Fund.

NEWS & PROGRAMS

Friends of the Medieval Studies Society



MARCH BREAK PROGRAM. ANNUAL SYMPOSIUM AND MORE

If you are interested in knights in armour, troubadours, damsels in distress, or castles in the desert, you must become a Friend of the ROM's Medieval Studies Society. Our interests are all things medieval, including art, history, archaeology, architecture, re-enactment, and anything else you can think of. Apart from the usual two newsletters and two talks just for Friends every year, we organize a number of special programs. Our living history presentation is a major contribution to

March Break at the ROM (March 15 to 19) -there's dancing, falconry, fashion, sword-fighting, music, games, and other fun and educational stuff. Then there's our annual symposium, held this year on March 27. Ten experts on medieval culture share their expertise—essential mind-matter for anyone keen on the medieval period. So get on your palfrey and amble on down to the ROM. Verily!

The Bishop White Committee

THE STONE LEGACY: A SYMPOSIUM ON THE GREAT ROM BENEFACTOR LOUISE HAWLEY STONE

What can a gift of a \$45 million charitable trust do for a Museum that's already a powerhouse repository of cultural artifacts and natural specimens? Plenty. Discover the iconic and rare objects the ROM was able to purchase thanks to funding from the

Louise Hawley Stone Charitable Trust. William Thorsell, ROM director and CEO, will discuss what this enviable beguest has meant for the ROM, and seven ROM curators highlight their Stone Trustfunded acquisitions.

Saturday, May 15, 2010, 9:30 am to 4 pm Signy and Cléophée Eaton Theatre ROM Members \$50; general public \$60; students with ID \$30 (including morning and afternoon refreshments)



ROMTRAVEL

Churchill Adventure

HALLOWE'EN IN POLAR BEAR COUNTRY

Hallowe'en in Churchill, Manitoba, may just be the world's strangest trick-or-treat—it is certainly one of the most demanding times for town authorities. This tiny hamlet nestled on the western shore of Hudson Bay is famous as the "polar bear capital of the world." Located directly on the migratory path of polar bears as they prepare to winter on the ice floes of Hudson Bay, Churchill sees more than 1,000 bears passing through during the season—from early October through November. It's the largest concentration of polar bears in one place at one time in the world.

Days before the big night, the town's Polar Bear Alert toils to keep bears out of town. Any mischievous hangers-on are trapped in humane cage traps and sent to Polar Bear Jail. As trick-ortreating begins, armed rangers, firemen, policemen, and volunteers establish a perimeter around town and helicopters circle above as an extra precaution for kids as they go door to door.

The bears themselves are fascinating. They can smell seal from 32 km away or through a metre of ice and snow. When hunting, they sit on their ice floes above a seal's breathing hole for hours, patiently waiting for a seal to surface for air. But global warming and climate changes are deeply affecting the bears' ability to hunt and survive in their environment. Each year, visitors from all over the world journey to Churchill for a once-in-a-lifetime opportunity to observe these beautiful creatures.



Come see these Arctic denizens before it's too late—join ROMtravel for a scary Hallowe'en in Churchill. Wildlife conservation officers are on call 24 hours a day during peak polar bear season to handle any bear issues in and around town.

 October 30 – November 3, 2010 \$4,625 (return flight from Winnipeg to Churchill included) For further information, contact ROMtravel at 416.586.8034, email travel@rom.on.ca or visit rom.on.ca/programs/rom_travel.

Upcoming trips

Chicago

September 27 – October 1, 2010

Jordan and Israel

October 30 - November 14, 2010

Indochina January 2011

Brazil February 12 – 26, 2011

Egypt February 13 - 27, 2011

Sicily May 19 - 20, 2011

Philadelphia May 2011

New York September 2011

China's Silk Road October 2011 India January 2012





EVENTS

PROM V: NOIR

EXPLORE THE DARK SIDE OF THE MUSEUM

Saturday, March 27, 2010

Join us on the dark side of the ROM with PROM V: NOIR, a thrilling night of dramatic glamour and cinematic fantasy inspired by the ROM's captivating collection of winged creatures from the newly revamped Bat Cave and the recently opened Life in Crisis: Schad Gallery of Biodiversity.

Join hundreds of Young Patrons' Circle members and guests for a sensational step back into vintage Hollywood complete with private eyes and *femmes fatales*. Experience the drama of a dazzling Golden Age film premiere—with a contemporary twist—as you pose for a mob of flashbulbs on the black carpet, investigate tempting diversions in the shadows, sip period cocktails, and shimmy the night away on a fierce dance floor to the sounds of a live Big Band and stellar Toronto DJs.

Channel your inner Bacall or Bogart and join us as we turn down the lights and light up the party with PROM V: NOIR on March 27, 2010.

PROM is an annual fundraising event hosted by the ROM Young Patrons' Circle (YPC) All proceeds support ROM priorities including the School Visits Bursary Program.

VIP: 8 pm. Price: YPC Members \$275 / Non-YPC Members \$295 Party: 9 pm. Price: YPC Members \$125 / Non-YPC Members \$150 For tickets, please visit rom.on.ca/prom or call 416.586.5772.

Co-star:

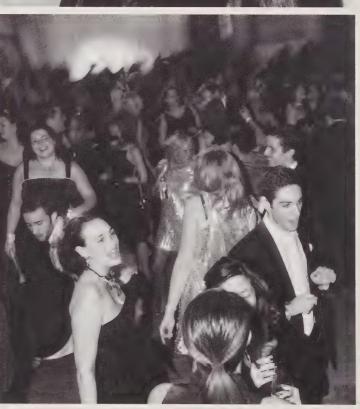


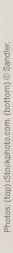
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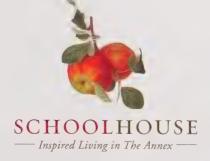
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SUPPORT

ROM's Annual Giving Programs

THE BENEFITS OF GIVING

Q: I'm interested in making a donation to the ROM. I've heard about the Royal Patrons' Circle and Young Patrons' Circle programs, but I don't know what the benefits are.

A: The ROM has two annual giving programs: The Royal Patrons' Circle (RPC) is our long-standing philanthropic annual program, established in 1984. The Young Patrons' Circle (YPC), established in 2005, is designed to engage young professionals who are interested in supporting the Museum.

The Royal Patrons' Circle (RPC) & The Young Patrons' Circle (YPC)

Giving levels

RPC gifts range from \$1,500 to \$25,000 YPC gifts start at \$600

Benefits

The best part about RPC and YPC is the many benefits Members are offered in thanks for their generous support of the Museum.

- ROM membership and all the associated benefits, including free admission
- Reciprocal privileges at more than 380 different cultural institutions across North America.
- Access to an exclusive calendar of events from behind-the-scenes tours to exhibition previews
- Intimate breakfasts and lunches with leaders from the ROM and the greater community.
- Discounts offered in c5 restaurant, Food Studio, and the Museum Store
- Benefit of a charitable tax receipt

For more information about the ROM's annual giving programs, please visit **rom.on.ca/members/levels**, call 416.586.5842, or e-mail **rpc@rom.on.ca** or **ypc@rom.on.ca**.

With great opportunities to see behind the scenes, why wouldn't you join?



A Warm Thank-You

OBELISK CELEBRATION MARKS END OF THE RENAISSANCE ROM CAMPAIGN

There was a warm and appreciative atmosphere on Sunday, January 31, 2010, as more than 600 donors visited the ROM to see their names in lights—on the ROM's commemorative obelisk. This distinctive sculpture, celebrating donors to the Renaissance ROM Campaign, was celebrated in its permanent home in the Hyacinth Gloria Chen Crystal Court to mark the end of the campaign. Donors enjoyed refreshments and were presented with a personalized photo taken near the obelisk as a souvenir.

The obelisk shape, an allusion to ancient Egypt, has associations with timelessness and memorialization—a fitting thank-you to the ROM's most generous donors. Its interactive, hi-tech update brings together the old and new: A slow graceful glow responds to hand movements and creates a connection between the donor and the space. More than 3,000 names are etched into its surface, a permanent reminder of those who made a gift to the campaign or made a gift in honour or in memory of a loved one. It is one way the ROM is recognizing their generosity—a munificence that helped to make Renaissance ROM one of the most successful cultural fundraising campaigns in Canada.



Dr. Kai Ming Kan of the Toronto Cathay Lions Club lights up the club's name on the commemorative obelisk.



SPONSORSHIP

The Robert H. N. Ho Family Foundation Presents The Warrior Emperor and China's Terracotta Army

Founded in 2005, the mission of The Robert H. N. Ho Family Foundation is to promote Chinese arts and culture. The Foundation actively supports programs like the ROM's presentation of The Warrior Emperor and China's Terracotta Army to encourage crosscultural understanding through the arts. At its home base in Hong Kong, it develops and operates creative arts education programs for local youth.

The Warrior Emperor and China's Terracotta Army will feature more than 300 artifacts that will bring to life the incredible story of China's First Emperor and his lasting legacy. The exhibition will demonstrate the historical and archaeological context of these national treasures, as well as detailing the most recent research and excavation. It will also present a reassessment of the First Emperor himself, the man who created China as a political entity.

A major area of the Foundation's work is to support projects that revitalize traditional Chinese arts, including a partnership with The Prince's Charities in the United Kingdom to present the film The Emperor's Secret Garden in Spring 2010, which tells the story of a unique building inside the Forbidden City in Beijing with some of the finest architectural interiors and decor of the Qianlong reign (1736–1795) that had been closed for almost a century. The Foundation collaborates with international partners to present a fresh take in traditional and contemporary Chinese arts, as well as introducing an innovative perspective on Chinese arts from other parts of the world to China.



何鴻毅家族基金 THE ROBERT H. N. HO **FAMILY FOUNDATION**

Life in the Afterlife

SPONSORED BY MOUNT PLEASANT GROUP

For more than 180 years, Mount Pleasant Group has provided families in our community with care, compassion, and choice while dealing with the death of a loved one. Through the management of cemeteries by Mount Pleasant Group of Cemeteries and the arrangement of funerals by The Simple Alternative, Mount Pleasant Group places the memories of life and the wishes of loved ones at the heart of their work

Presented in conjunction with The Warrior Emperor and China's Terracotta Army, a three-day symposium called Life in the Afterlife will explore different perspectives on the afterlife, including cultural and societal differences, similarities, beliefs, traditions, and practices. This exciting symposium, sponsored by Mount Pleasant Group, will feature ROM curators as well as renowned scholars from Canada and abroad.



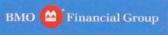
Mount Pleasant Group

The China Connection

BMO FINANCIAL GROUP SPONSORS THE WARRIOR EMPEROR AND CHINA'S TERRACOTTA ARMY

BMO has been building relationships in China almost as long as the bank has been in business. The bank undertook its first foreign exchange transaction in support of trade with China in 1818. Today, BMO is the only Canadian bank with branches in Beijing. Guangzhou, Shanghai, and Hong Kong, As the lead sponsor of the ROM's presentation of The Warrior Emperor and China's Terracotta Army—the largest exhibition of artifacts related to the First Emperor ever to be presented in Canada—BMO reaffirms its deep commitment to China.

Since its discovery by local villagers in northern Shaanxi province in 1974. China's Terracotta Army has captivated the world's imagination. Excavation has been ongoing ever since at the site, arguably the most famous archaeological site in the world and designated as a UNESCO World Heritage site. The terracotta soldiers represent one of the most significant archaeological finds of the 20th century.





anduran milksnake (Lampropeltis triangulum hondurensis).

Fatal Distraction

One snake's strategy for staying alive

BY AMY LATHROP



This specimen of a Honduran milksnake lives behind the scenes in the ROM's herpetology live room and is taken into the galleries from time to time to interact with Museum visitors. At a little more than a year old, it measures about 60 cm long, though during its expected lifespan of 10 to 15 years, it could more than double its length. Typically, this species is found in lower montane tropical rainforests on the Caribbean side of Honduras, Nicaragua, and northern Costa Rica.

The snake is not venomous (and is closely related to the eastern milksnake found in Ontario). But like other members of the genus *Lampropeltis*, which tend to have contrasting colour bands of red, black, and yellow or white, this snake is a master of the evolutionary strategy called Batesian Mimicry—whereby a harmless organism adopts the warning signals of a noxious or deadly one. Where both snakes occur in the same habitat, potential predators tend to play it safe by avoiding the harmless snakes as well as their deadly look-a-likes.

The ROM's milksnake looks remarkably similar to the deadly variable coral snake (*Micrurus diastema*). The only difference in their appearance is the order of the colour banding. Every herpetologist is familiar with the life-saving adage: "Red next to black, is a friend of Jack, red next to yellow, will kill a fellow." This rhyme holds true in the US, Mexico, and Central America. But in South America it's herpetologist beware—deadly snakes there don't follow the rule. o

AMY LATHROP is the technician in the Herpetology section of the ROM's Department of Natural History.

James' Legacy

Over the years, many gifts of individual natural history collections have greatly enriched the ROM, but James H. Fleming's immense bequest was in a class by itself.

In 1943, his donation was described as "the most representative private collection of birds in the world." With more than 34,000 specimens, even today it makes up one quarter of the ROM's ornithology collection.

In a memorial to James, his friend L. L. Snyder evocatively described a visit to his home: "Whenever I sense that pleasant perfume, for such it is to me, compounded of old books, tobacco smoke, naphtha and seabirds, memories of Fleming and his museum will be recalled."

J. H. Fleming was a dedicated ornithologist who devoted his life and fortune to the scholarship of natural history. His legacy contributes to our understanding of the natural world today.

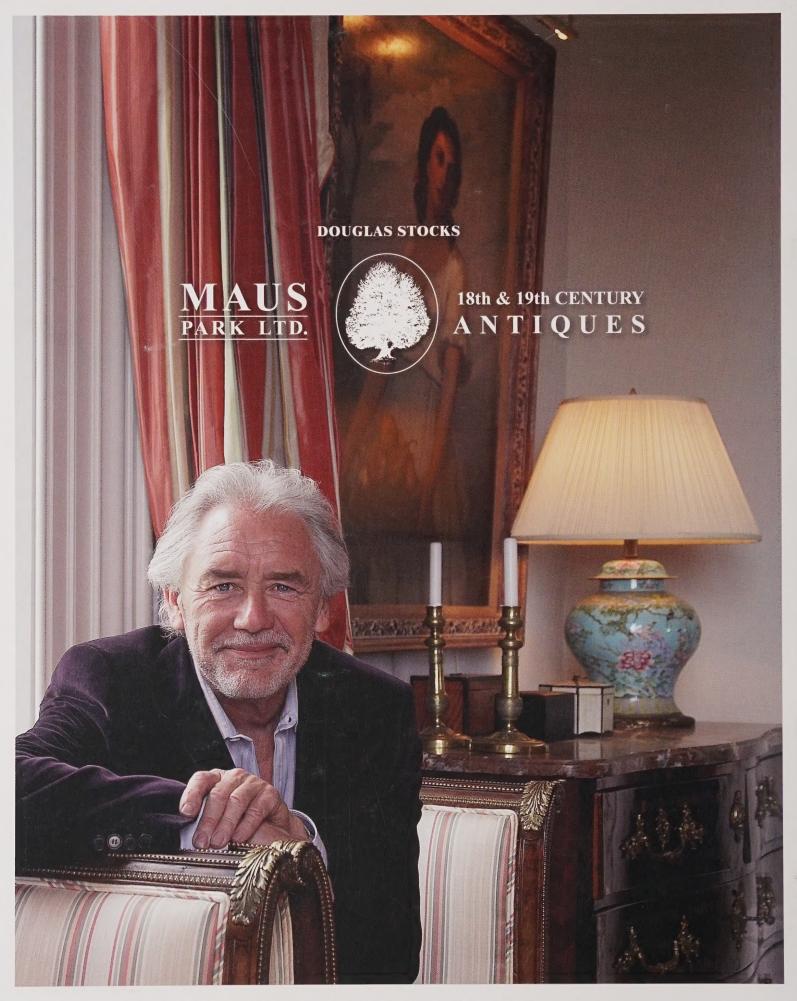
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